

# AMERICAN AGRICULTURIST.

Designed to improve all Classes interested in Soil Culture

AGRICULTURE IS THE MOST HEALTHFUL, THE MOST USEFUL, AND THE MOST NOBLE EMPLOYMENT OF MAN—WASHINGTON

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## American Agriculturist in German.

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### December.

"Now, all amid the rigors of the year,  
In the wild depth of winter, while without  
The ceaseless winds blow ice, be my retreat  
Between the growing forest and the shore  
Beat by the boundless multitude of waves;  
A rural, sheltered solitary scene,  
Where ruddy fire and beaming tapers join  
To clear the gloom. There studious let me sit,  
And hold high converse with the mighty dead;  
Sages of ancient time, as gods revered,  
As gods beneficent, who blessed mankind  
With arts, and arms, and humanized a world."  
THOMSON.

The closing month of the year has come, with its short days and early twilight, its fierce storms and biting cold. The harvests are gathered, the leaves have fallen, the stock are sheltered in the barn to consume the crops their labors have aided the earth to bring forth. There is a pause in all the activities of life, and man has time to look back over the labors of the year, and to contemplate the scenes amid which he is a busy actor. Nothing is lost to human happiness or progress by this change from activity to comparative rest; We know that Nature loses nothing by hibernating. Her greatest activity follows immediately upon this period of rest. Every sleeping bud and germ is gathering strength for a new effort with the opening Spring. These terrible frosts, that send such a chill to our bones, are plying the clouds with more potent forces than human art ever brings to bear upon them. The most adhesive and indurated lumps are disintegrated and powdered, as the plow and harrow could never crush them.

Man also is forced into a comparative rest for his physical powers. The vital energy no longer spends itself upon the reproduction of muscle. Mind is quickened by the changing season, and brought in contact with new scenes, and new objects of interest. There is time, now, to look at the principles that underlie the activities of the

year, time to study the economies, the moralities and the esthetics of life. If the farmer improves the leisure of Winter, he will lose nothing by the cessation of labor. *Mind rightly directed will economize labor in the house and upon the farm*, in a thousand ways. The reflections of a single Winter evening may save weeks of toil next Summer, when time is so valuable. Some trifling change suggested by the fireside may save hundreds of dollars of needless expense. Happy is the man who takes lessons from the field and forest, and uses Winter as a season of getting ready for the pressing labors of Summer.

As you are gathered around your happy fireside, on these cold December nights, we will throw in a few hints to help your reflections. Is every thing about your house as comfortable as it might be? "Oh no," you respond. "I have little ready money, I am in debt for my farm, and I am not able to purchase elegant furniture, or to indulge my family in sofas and easy chairs."

But the luxuries of life, the parlor adornments to be used on rare occasions, have little to do with every day comfort. Many a man has these, who is daily suffering from inconveniences, that a very little time and money would remove. Your house has been leaking with every shower, all through the Summer. Have you ever thought how many steps those leaks made your wife in the course of a year? Every shower, the tubs and pans have to be carried to the attic to catch water, and then carried back again to the cellar. This comes often when she is weary, and leads to fretfulness and discomfort. The walls are stained, the carpets and furniture are injured, and a fair face that you love, is often beclouded for want of a hundred shingles, and a sixpence worth of nails. Those leaks stopped in some leisure hour, would do your wife more good and promote household comfort more than a five hundred dollar piano in the parlor.

As we are chatting here by the fire, unwholesome gusts come puffing in at the windows, and the cracks of the door. One side is about as much too cold, as the other is too hot. Your family must take cold often in these currents of air. Have you ever thought how extravagant a luxury these December breezes, indoor, were? Really they are more costly than the parlor ornaments of your rich neighbor that you think you can not afford. Wood is worth with you, perhaps four dollars a cord, cut up ready for the stove; and you use up two cords extra to keep the room comfortable during the Winter, and fail in the endeavor. A single day's work of the carpenter would make the doors and windows tight, and put in a ventilator in the chimney, and save you this annual expense for fuel with all its concomitants of colds, and doctor's bills.

Your well in daily use is thirty rods from the house, at the foot of the hill, put there because less digging was necessary, or a natural spring invited. Consider, now, how many steps are

taken to visit this spot thrice or more, daily, and how much labor is involved, in thus carrying water up hill all your days. The good wife, or the maid, who draws the water has often suggested that a well might be dug within a rod of the door just as bountiful in its supplies of water, and much more convenient. It would save many days of labor every year, and much wear and tear of spirit. Shall that well be sunk, and an endless chain be put in, to give your family water, where they want to use it?

Washing is the heavy business of housekeeping, and bears hardly upon woman. Is this made as easy, and comfortable, as it might be? The water has to be drawn, heated, and emptied after use, each change requiring labor. Now suppose instead of the cedar tubs, you had one large square pine tub, with four divisions in it, put up as a fixture on the side of the wash room, and furnished with pipes and stop cocks that would turn on the water and let it off, without your lifting a finger. Instead of all those weary journeys to the well, the washer turns a faucet, and her tub is filled. She turns another and hot water comes in from the boiler. She pulls a stopper, and the soap suds are passed off into a vault, where all the wastes of the house are collected for fertilizers. Full one half of the drudgery of washing day is saved by these simple contrivances. The thinking mind does the work of many hands. These labor saving inventions are adopted in many farm houses, and may be in yours.

Hark how the wind whistles, and the snow is piled up in huge embankments under every wall, and around every corner! What a charming thing it would be, if we could break off this fierce wind and compel the snow to fall on a level, and make smooth paths for the cattle! This can be done, at least so far as your premises are concerned. You have often cut wood in the forest, in the depths of Winter, and observed that there were no banks of snow there. However fierce the winds, the snow comes down gently through the tree tops covering the earth as evenly, as if it fell on a day of Summer calm. All this, man may imitate on the bleakest spot, and in a few years shut out his home from the violence of the Winter blasts.

Shelter is every year attracting more attention from rural improvers. No sight is more common in our older farming districts, than long lines of shade trees planted by the road side, or belts of Arbor vitae, Norway Spruce, Hemlock and Fir, designed especially to keep off the winds and snow banks. These not only add much to the warmth and comfort of a home in Winter, but they throw around it an air of refinement and taste, pleasing to every observer. These are cheap luxuries within the reach of almost every cultivator of the soil. In this period of rest and reflection, let him ponder these inexpensive methods of adding to the comforts and attractions of his home. We drop the subject here to be resumed again during the succeeding Winter months.

## Calendar of Operations for Dec. 1858.

[We note down sundry kinds of work to be done during the month, not so much to afford instruction to practical men, as to call to mind the various operations to be attended to. A glance over a table like this will often suggest some piece of work that might otherwise be forgotten or neglected. Our remarks are more especially adapted to the latitudes of 38° to 45°; but will be equally applicable to points further North and South by making due allowance for each degree of latitude, that is, earlier for the North, later for the South.]

This table will be much fuller, and more important, during the planting season when there is a greater variety of work to be done.

**EXPLANATIONS.**—*f* indicates the first; *m* the middle; and *l* the last of the month.—Doubling the letters thus, *ff*, or *mm*, or *ll*, gives particular emphasis to the period indicated.—Two letters placed together, as *fm* or *ml*, signifies that the work may be done in either or in both periods indicated; thus, work marked *fm* indicates that it is to be attended to from the first to the middle of the month.]

**Farm.**

Review the full directions given last month and complete any operations omitted until now. Hard frosts and northern snows are near at hand, for both of which the thrifty farmer is about prepared, having his Autumnal work so done up that he sleeps sweetly at night, undisturbed by fear of snow before morning, upon an acre of turnips still unharvested.

The close of the year is an appropriate season for balancing the accounts of the farm. It is well to make an inventory each season. Any permanent improvements should, of course, be considered as enhancing the value of the farm and placed to its credit. Live stock, hay, grain and other provisions on hand should be summed up, the outstanding debts taken account of, and, by comparing the statement with the previous year, one can readily conclude whether he makes his farming operations pay.

If the merchant takes an exact account of stock each year to ascertain his standing, why should not the farmer? It need take very little time except a few of the Winter evenings.

The present comparative leisure will afford a good opportunity to re-read the back numbers of the *Agriculturist*, some of which were received at too busy a season to give them all the thought they deserve. Mature early all your plans for next season, deciding what fields to plant, what to sow, how many drains shall be dug, and where young orchards shall be planted.

Some of the surplus produce may now be marketed and the grocer's and other outstanding accounts liquidated. Resolve that during the coming year you will "pay-as-you-go," rather than run up lengthy accounts like those you now find it difficult to pay off. Keep a strict expense and cash account, taking and filing away receipts, which, besides saving many disputes, and sometimes paying bills twice will enable you to discover where some of the leaks are, and if created by the purchases of those things you would be better off without, resolve to stop them at once. Remember that the apparently small sum of six cents per day spent for drink or tobacco, will, during the next ten years, amount to over \$300, to say nothing of the time spent in getting it and the constitution injured by its use. But moralizing aside, let us look over the farm, and especially at the

Buildings for both man and beast, to see that they are as comfortable as possible. If not already storm proof make them so, if.

Cattle come in for a large share of attention now. Complete fattening the beesves as early as may be, keep up the flow of milk by giving cows the remaining pumpkins, turnip and cabbage tops, with cut feed and Indian meal, or shorts; supply full feed to young stock that they suffer no check in their growth; have working oxen sharp shod where the ground is frozen or icy; and see that all the stock is sheltered at night, well supplied with water and salt, or salt hay given them once a week.

Cells may need additional protection to keep out frosts.

Christmas—May it be a merry one to all, and a feast of fat things, in which the poor are not forgotten.

Drains may still be made where the ground is not too wet or frozen.

Fencing—Get materials from the woods and swamps and split a full supply of rails, and prepare posts against the busy season of next Spring.

Fodder—Do not waste it about the barn, but run it through a straw or hay cutter and add some kind of ground feed. Use racks in the yards to keep it from being trodden under foot. See illustrations elsewhere.

Forest Leaves—Large quantities of these are still blowing about the roadsides and wood borders. They make excellent bedding, manure and hot-bed materials. Shall a few loads be secured under cover, before it is too late?

Hedges—Plant, *ff*, at the South, and where the ground will admit of working.

Hogs—Complete fattening, *ff*, those intended for killing. Keep their pens and yards well supplied with muck and other manure agents and absorbents. Have an eye to the increase of stock, and turn the male among your breeding sows, *ff*, if early pigs are wanted.

Horses and Mules—With grain feed, give a portion of carrots, and see that their stalls are warm and well bedded at night. Ventilate their stables and use absorbents or deodorizers to take up the gasses which are unhealthy to breathe but valuable when fixed in the compost heap. Keep horses well shod.

Ice Houses—Fill with the first firm, thick ice, which is usually the best of the season. Houses may still be built.

Manures—Push the manufacture of these at this season. Use muck, loam, leaves and straw to absorb all the liquids of the yards and stable. Cart a large heap of muck from the swamp to the stables for Winter use. A free bedding of it under horses to absorb the urine, will make twice as much manure as would be saved where all the liquids were allowed to run to waste, with no absorbent.

Plowing during open weather may still be continued on clayey soils when sufficiently dry.

Poultry—Give warm quarters, plenty of food and drink, with gravel, lime and meat, and you may expect eggs in the Winter season. Clean roosts often, barreling the contents for an excellent home-made guano.

Schools are now in session in most districts. Let the children attend as steadily as possible, and show them, by frequent visits, that you take a lively interest in their success.

Sheep—Provide racks for, and feed under cover during storms. Keep horned cattle and horses from them. Give turnips or carrots, instead of all dry feed. See that they are supplied with salt, and provided with a good buck, of an improved breed, if possible.

Tools—Look over, during the stormy days of this month, and if any need repairing you can better afford the time now than when they are wanted for use at a busy season. New ones of domestic manufacture, such as harrows, ox yokes, bows, hoe, fork and ax handles, wood sleds, &c., may also be made. Don't let a snow storm bury the plow in one place, harrow in another, the ox-yokes here, and chains, axes, &c., somewhere else. They should be housed every night.

Turnips—Harvest, *ff*, any still in the ground. Give pits an additional covering and close the ventilators at night if there is danger of freezing.

Water Pipes and Pumps—See that they are sufficiently protected from frosts.

Winter Grain—Allow nothing to graze upon the fields during the present month. Water should not be allowed to stand in little ponds upon them.

Wood—Commence early to get up the Winter supply. At the North where abundance of snow falls it is better to cut and draw together as much as possible before the deep Winter snows fall. Early snows usually make the best sledding to draw it home upon. A year's supply should be brought to the house, cut and stored under cover some time during the Winter, the earlier the better.

**Orchard and Nursery.**

There is comparatively little to do in the Orchard and Nursery the present month. In the orchard, unless dislodged last month search out the

Borers which have ensconced themselves in their Winter quarters. A piece of whalebone or bent wire will usually finish their career if thrust into their holes near the root of the tree.

Labels and Stakes—Prepare a full supply for Spring use in the nursery. See that labels on standard trees are sufficiently firm to stand the Winter. They should be attached by copper wire which can be lengthened as the tree increases in size. Loosen any which are cutting into the bark.

Mice—Where snow covers the ground, it is well to trample it down after each fall, to form an icy mass which they will find it difficult to pass in attempting to gnaw trees above ground. If the ground is not frozen, bank up about each tree, removing the earth in the Spring.

Nursery Rows—Plow them out before the ground closes, turning the furrows towards the trees and opening drains between the rows to pass off the surplus water.

Old trees may now have the loose rough bark and moss removed to good advantage. Many insects which have harbored there will thus be destroyed. Where the ground is not frozen better manure now in preference to leaving it till Spring.

Pruning, omitted at the appropriate season last Summer, is better done now than in the Spring. It is not well however, to leave fresh wounds subject to the freezings and thawings they must soon receive.

Scions—Cut, *ff*, *m*, for Spring grafting. Guard against any mistake as to kinds.

Seeds and Pits for Fall Planting—If any of these are

still out of ground, put them in at once according to directions previously given in this Calendar.

Shrubs—These may still be transplanted during open weather. Tender varieties will require some protection as referred to under "Flower Garden and Lawn."

Transplanting—Continue, *ff*, during open weather. Never allow the roots to freeze during the operation. Evergreens and tender stone fruits do better when set out in the Spring.

Trench or subsoil grounds that are intended for early planting next Spring. Besides greatly improving the land it will render it warm and dry, and capable of being worked much earlier in the Spring.

**Kitchen and Fruit Garden.**

Very little gardening can be done during this month at the North, but at the South the soil may be manured, plowed and laid out, and many of the early vegetables sown on warm, dry grounds. In this latitude, however, possibly some of the November work was omitted and needs early attention now. Read directions on page 369 for putting the grounds in a neat condition for Winter, and ridging heavy soils so that frost may act upon them.

Asparagus beds not covered last month should receive a coating of coarse manure, *ff*. Spread the old stalks, and the vines of the garden over the manure, which will protect from frost and cause an early start in the Spring.

New beds may still be made where the ground is open. Bean and Hop Poles, Raspberry stakes and Pea brush may be collected from the frozen swamps and stored away for the more busy season of planting.

Cabbages and Cauliflowers—If any are still in the gardens, put them in Winter quarters, *ff*, as directed in the November number. Those in frames require air at all suitable times. See under Cold Frames.

Celery—Harvest, *ff* any remaining in the ground, and put in trenches, covering with boards or straw to keep out frost.

Cold Frames—Air these at all suitable times. When the weather will not admit of removing the sash entirely, raise the upper portion on the back side a little. Pick off all decaying leaves before they taint the atmosphere. Upon the approach of severe weather, bank up with manure and cover with straw and mats to exclude the frost.

Compost and Manures—Now is the time to make and collect these. Keep every receptacle or manufactory at work by supplying the hogs, cattle, horses, sheep, poultry and privies with material to absorb the liquid and gasses. Too much muck can scarcely be used for these purposes. Decayed leaves also form an excellent ingredient in garden soils. Prepare materials for early hot beds.

Currants and Gooseberries—Read the article upon currant bush insects on page 366, and try the plan there recommended to destroy them. Cuttings may still be made, *ff*, when the branches are not frozen.

Fig Trees—Surround with evergreens, straw, or mats, or lay small ones upon the ground and bury them.

Fruit on Shelves, or in the Fruit Room, will need examining often. Keep moderately cool and not too dry.

Fruit Borders—Cover with a mulch of coarse manure to protect from severe freezing and enrich the earth. An embankment about each tree will often prevent its being girdled by mice. Trees may be set, *ff*, on warm soils, as long as they are not frozen.

Grapes—Lay tender varieties upon the ground, *ff*, if not already done. A moderate covering of earth is best for Hamburgs and other house grapes which have been growing out doors. Even Isabellas and Catawbas are better, in northern latitudes, for a slight Winter protection. Cuttings may still be made, *ff*.

Hot Beds—Collect materials such as leaves, tan bark, &c., and have a quantity of stable manure and prepared earth in readiness for early beds. Prepare frames and sash that there be no delay when they are wanted for use.

Mushroom Beds—Keep from frost and cold rains. They will continue to bear when properly managed.

Patience—Bury a few in sand, in the cellar, to draw upon when the main crop is frozen in the ground.

Pruning of grapes and small fruits may still be done, *ff*, if omitted last month.

Raspberries—If not covered in November attend to them, *ff*, as directed elsewhere. (See page 369.) Plants may still be set out where the ground is not frozen.

Rhubarb—Cover as Asparagus.

Seeds—See directions of last month.

Spinach—Cover, *ff*, any neglected last month.

Strawberries—If not already protected, spread over a light covering of straw, coarse manure or leaves.

Turnips—Harvest and store, *ff*, any still in the ground. Look to those covered pits and bank up as the weather demands, closing the ventilators at the top.

**Flower Garden and Lawn.**

If these grounds were well cared for last month, tender plants taken in or protected, rubbish gathered up



walks, lawn and borders raked over there will be very little requiring absolute attention now.

Where the land will admit of working, grading and laying out new grounds can be done to advantage, especially if the Spring should prove wet. Put everything in neat order that there be as many attractions as possible even in Winter. Read remarks on page 369.

**Auriculas, Anemones, Polyanthus, Ranunculus and Primroses**—Cover with coarse manure, leaves or straw, to prevent sudden and severe freezing.

**Biennial and perennial roots**, unless covered with snow, will keep better, and start earlier if mulched, that is covered with coarse manure, straw or forest leaves. During mild weather they may be divided and reset where the ground is not frozen.

**Bulbs**—Plant, if, any which chance to be still out of ground. Full directions have already been given. See also the illustrations and remarks on page 371 relative to bulbs in glasses. A moderate covering of some kind will greatly improve the future bloom. Coarse manure, straw, &c., will make a good protection.

**Chrysanthemums**—Cut away old flower stalks, marking the desirable varieties you wish to propagate from. The roots may now be divided and reset where the grounds are in working condition.

**Dahlias and Gladiolas**—See directions of last month, if any are still in the ground, and unfrozen.

**Daisies, Carnations and Pinks**—Protect as Auriculas, or they are liable to Winter-kill. Evergreen brush spread over them forms a good covering. A few may be taken to the green house for early blooming.

**Evergreen Trees and Shrubs**—Shake off any accumulations of snow to prevent the branches from being broken. **Frames and Flower Pots**—Keep closed, and covered with straw, mats, &c., during cold and inclement weather. They need not be opened during the month unless a succession of fine days occur.

**Labels, Dahlias and other Stakes**—Procure or make these during the leisure of this and the following month.

**Roses**—Divide roots, remove layers and transplant, if, where there is no frost. Tender sorts may be protected with evergreen brush or straw, or better lay them down and bury with earth as directed for raspberries on page 369.

**Shrubs**—Hardy varieties may still be planted, if, in many localities. Do not move them during freezing weather. Protect tender varieties by placing evergreen boughs about them. Boxes and barrels confine the air too closely, often molding the plants. A compact mass of straw is likewise close and difficult to dry after heavy rains. Place three or four red cedar, Arbor vitae, or other evergreens, about the shrub, extending one foot above it. Draw them in with twine or willow, closely if very tender—and you have an evergreen, and ornamental cone, through which only sifted wind can penetrate, and from which moisture will soon dry.

**Trees**—Plant hardy ornamental, if, where practicable, in preference to leaving till Spring.

### Green-Houses.

Most of these are supposed to contain plants which need only be kept from freezing during the Winter, relying upon the Summer for their bloom. Some of them, however, in the absence of forcing houses, are made to perform the office of green and hot-house. This is attained with difficulty unless there are divisions to the houses so that some may receive more heat than others. In the green-house proper, the temperature should be kept at about 40°—never below 35° or above 50°. To maintain this warmth a little fire heat will occasionally be needed, both to resist cold and dry up dampness during wet and foggy days. Only resort to fire heat when absolutely necessary. Place the shutters on early at night, and even keep them on during very severe or snowy weather—taking them off as soon as practicable to give the plants light. Admit air also at all proper times.

Very little water will be required this month, especially to woody plants, such as oranges, lemons, oleanders, myrtles, &c.

Keep everything neat and clean, removing decaying leaves and moss from the surface of pots and tubs.

Bulbs that were put in the ground until this season, should be potted, if, and kept in a cool part of the house to be carried to blooming apartments as needed.

### Hot-Houses.

December is often a trying month for this department of floriculture. The keen piercing winds whistle in at every crevice, mows fall upon the glass or shutters rendering it difficult to keep an even and proper temperature. A thermometer should always be hanging in the center of the room, and often consulted. As in the green-house, so in these apartments different degrees of heat are required for different collections of plants or for the same plant according as it is in a state of rest or forced growth. This is usually provided for by several houses, or divisions of

the same house with a moderate heat in some, say 55° to 60°, while tropical and forcing plants may require 70°, and even 75°, when the sun shines—they bear more heat in sunshine than in shade. Few plants require much forcing now, the chief object being to keep them moderately inactive and prepare them for a vigorous growth next month.

**Air the houses each day**, if the weather is suitable. Avoid a draft by lowering only the upper sashes a few inches in the middle of the day. Cover with shutters during cold nights and snowy weather. Mats hung before the side glasses will help keep out penetrating winds.

**Bulbs**—Bring a few from the green-house every two weeks to keep up a continued bloom, or prepare them for flowering in the parlor. Water freely. Read article on "Hyacinths in Glasses," page 371.

**Camellias** are now growing finely and nearly ready for bloom. Syringe, wash the leaves and water freely.

**Decaying leaves, moss and weeds** should be removed as they appear, both to preserve a sweet atmosphere and neat appearance.

**Fires**—Trust them to skillful hands. Unless water-pipes are used—which are far the best—too much heat is as injurious as too little. A steady, even temperature is desirable, which may require some night work.

**Grapes**—The outside borders should early be covered with coarse manure, straw or leaves. See that the drainage is good. The appearance of the vines inside differs greatly at this season. Some are still lying upon the floor in an inactive state, others have just been tied up and are bursting into growth, while it is possible to have fruit nearly ready to color on early forced vines. The treatment in each case must be governed by the forcing they have received.

**Heaths**—Water freely as they approach the blooming season.

**Insects**—Assiduously keep them in check with syringe, oil soap, and tobacco fumes.

**Mildew**—Sprinkle sulphur on the flues, dust the plants or otherwise use it, with caution, among collections subject to mildew.

**Orchideous plants** require a humid atmosphere, but no standing or stagnant water at the roots. Keep from direct sunshine.

**Roses**—Get up a good collection for Summer bloom. Cuttings may now be made. Force a few for Winter flowering.

**Verbenas and Pelargoniums**—Propagate freely for a Spring stock. Keep flowering plants near the glass and water freely.

**Water**—Most plants now require only moderate waterings—those in a state of rest once a week, while the growing ones need it twice a week and plants in flower, even oftener. Syringe, or sprinkle the floors occasionally to produce a humid atmosphere.

### Apiary for December.

BY M. QUINBY.

St. Johnsville, N. Y.

If it is intended to Winter bees in the house, and preparations are yet to be made, they should be attended to immediately. Our Winter will be quite sure to begin in earnest this month, in all places north of N. Y. city. As soon as it is evident that there will be no more pleasant days for them to fly, take them in. A dry cellar is as good as any room above ground, but whatever room be used it should be warm and dark. Dampness is bad, any freezing is also bad. The least ray of light is bad. If the proper requisites can not be secured, better leave them out of doors. Over fifty stocks in a small room will keep the temperature above the freezing point at all times, unless too much air is admitted; a very little is sufficient. Second or third rate stocks that would perish in a week, in the cold air, can be successfully Wintered in a suitable room. Twenty-five per cent of the honey may be also saved, by housing. A double casing to form a dead air space around such room is a great advantage to keep out frost; the bees are less affected by changes in the weather, and are more quiet. Put in shelves, and pack close, but do not let the hives quite touch each other or the shelf above. Lay down some sticks one inch square, and turn the hive bottom up on them, for proper ventilation. When first turned over, a great many bees will come out of the combs, and will creep away, if there is anything to travel on, but if not, will soon return when left in the dark.

Such as are intended to stand out-door, ought not to be moved until severe weather. If possible the Winter and Summer stand should be the same; moving them in the Fall, before they are done flying, or in Spring after they have commenced, is bad economy. Arrange so as to avoid it if possible. Let such stands be out of the prevailing winds, and where the sun will strike the hives each day a short time. The sides, back and top, and sometimes front, may be protected with hay or straw. Ventilate by raising the hive one fourth of an inch, cov-

ering all holes large enough to admit mice, with wire-cloth, leaving a space just large enough for a bee to pass. Open the holes in the top, and set over an empty cap to receive the moisture.

Hives and boxes to be used another year, especially those containing combs, should be set right side up, secured from mice, in some dry place where they will freeze hard, and kill all moth eggs about them.

**CORRECTION**.—A typographical error last month makes me say "the best bee-bread is stored in the combs near the top and side of the hive." It should read "the least bee-bread, etc."

### Poultry—How to Prepare, Kill, Dress, and Market.

We went through Fulton Market on Nov. 2nd, to purchase a little extra poultry for a special occasion, and though there were turkeys enough, we could scarcely find a young tender one, looking "fit to carry home." The fault was not in the animals themselves, for there were young ones enough, and some of them in fair flesh, but they were so bunglingly dressed, so torn, blood-covered, and otherwise bedaubed, that a sight of them before being browned in cooking was enough to greatly diminish the pleasure of eating them afterwards. We took the best we could find, at 15 cents per pound; but for the particular occasion, and on almost any other, we would have preferred to pay double price for a good looking bird. And this is about the feeling of every purchaser of poultry. They will generally say or feel, "give me this small, neat turkey, at 18 cents per pound, rather than that large, slovenly dressed affair at 12 cents," even though the larger one be fatter and tenderer. The same is the case in regard to other poultry. The truth is poultry raisers have no idea of the dollars they lose for want of a few pence worth of time in dressing the animals well, and sending them to market in good condition. Last year, with the assistance of skillful dealers, we prepared and published some concise directions on this topic, which, from the importance of the subject, we will repeat here in substance.

**Preparing**.—Make them fat. A grain-fed, plump, fat fowl will sell for double the price per pound of a lean one. A liberal feeding for a few weeks before killing, will nearly double the weight and double the price, making a quadruple return for the finishing off food.

**Killing**.—Keep them from bruising themselves. Secure the wings the instant they are caught, and tie them behind the back. Tie the legs together, hang them upon a pole, and then cut off the head with a sharp knife, leaving as long a neck as possible. Let them hang until they bleed clean. Keep them from food for two or three hours before killing. Any grain left in the crop sours and materially injures the flesh if kept long before cooking.

**Dressing**.—Pick them dry, taking particular care not to tear or bruise the flesh. If scalded at all, let it be done quickly and in water not quite boiling hot. Be careful not to rub off the outer thin skin from the legs. If not to be packed in boxes, after picking dry or scalding, wash them in clean warm soap-suds, and "plump" them, that is hold them in boiling water about five seconds. If to be packed for carrying a long distance do not wet them at all, except to wash the neck. Strip back the skin on the neck, cut off the neck bone, draw the loose skin over, tie it tightly, cut off the bloody portion a little way above the string and wash off any blood, wiping dry. This will keep them clean and bloodless, and increase their saleableness.

**Marketing**.—Let them hang until entirely cold, and then pack in rye straw if it be obtainable.



putting them into boxes holding not over 200 pounds. The packing straw should be bright and clean, and it will be greatly improved by drying it in a warm oven before using. Put straw between the carcasses, and around the sides of the box—enough to act as a spring to prevent bruising, and pack straw closely under the cover. A little care of the kind described above will greatly increase the market value. Most persons keep back all their poultry until Christmas or New-Year's day. This is not always the best policy. We have noticed for several years, that poultry is scarcest and highest here for a few weeks before the holidays. As soon as settled cold weather arrives, poultry if dressed and packed as above in tight boxes, may be sent from the most Western States to this market. Contract for the through expenses and send to some reliable commission dealer who will take the packages in charge on their arrival, and dispose of them at once and return the proceeds, less a small sum for the trouble—usually about five per cent. of the price obtained. Another hint. Always send with your packages a careful invoice, or statement, of just what you forward, and your wishes in regard to it—together with your name and address. We make this suggestion because a dealer here informed us but yesterday that more than half the packages came to him without any invoice or other information as to whom they came from, or the kind and amount, and the wishes of the seller in regard to them—this being usually left for a letter, which frequently arrives after the poultry is sold, or should have been. Poultry should also arrive two or three days before special holidays, instead of a day after. This often makes a difference of ten to twenty per cent. in the proceeds.

For the American Agriculturist.

#### Look out for Incendiaries!

If it was known by the farmers of any town that a company of incendiaries were engaged in burning the stacks of hay and grain, gathered with so much labor during the Summer, the greatest excitement would prevail. Sheriffs, constables and their deputies would be on the alert; patrols and watchmen would be employed, and Judge Lynch would hold himself in readiness to "serve 'em right" when caught.

And yet on many farms nearly one-third of the hay and grain fed out during the Winter is needlessly burned. Let us see.

Food is taken by animals to sustain heat as well as furnish nutriment. At every breath, oxygen from the inspired air unites with carbon in the blood, exactly as it does in a burning stove, and heat is given out; thus, part of the food, having first changed to blood, is burned as certainly, though not as rapidly, as if it had been used for fuel in the stove. The colder the weather, the greater the quantity of food required to supply animal heat. Every observing farmer knows that it requires more food to fatten cattle in cold than in warm weather, and here we have the reason.

The Winter will soon be upon us. The intelligent and thrifty farmer will provide warm shelter for all his stock, thus saving enough in hay and grain each Winter to keep his buildings in good repair, his flocks replenished with good stock, and something pleasant besides.

Only the ignorant or careless will willingly leave their cattle to shelter themselves as best they may, under the lee of a stack or a rail fence, and let them go on uselessly burning up one-third

of their fodder, to enable them to keep their disconsolate lives in their shivering bodies.

When we see a dilapidated stable or an open shed for cattle, or worse still, no provision for shelter, we think, here's work for incendiaries this Winter! Remember Jack Frost has burned more hay-stacks than were ever destroyed by midnight marauders, and keep the doors well shut against him.

CARBON.

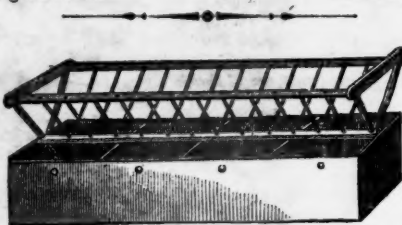


Fig. 1.

#### Another Feeding Rack

To the Editor of the American Agriculturist:

Having seen several articles in your journal on "Feeding Racks," I will add another plan which I have used on my farm for several years. The general plan will be shown by the enclosed rough sketches, if you have them engraved. They are used both in the stable and yard. In the latter they are made double, so that animals eat from both sides. First, we have a box or manger, two-and-a-half feet high, and extending two-and-a-half feet each way from the bottom of the rack. The box and rack are made of any desired length to suit the circumstances, such as the size of the yard, number of cattle, etc. The rack may be made of poles or sawed stuff. I bore the holes for the spokes or rounds five inches apart. The spokes are two feet eight inches long. The advantages of this rack are, that it not only prevents the cattle from taking a large mouthful at a time and dropping it under their feet, but the box also catches and saves all the fine stuff, a large amount of which is wasted in the ordinary mode of feeding.

J. LYON.

Rockland County, N. Y.



Fig. 2.

#### Notes on the Seeds for Distribution in 1859.

On a subsequent page is a list of seventy-three different varieties of seeds to be distributed free among our subscribers, during the months of January and February. We have six or seven other new varieties which we contemplate adding to the list next month, but it is yet doubtful whether we can get seed in sufficient quantity. Our regular list last year contained fifty-one varieties. From this list we have dropped several kinds, and added some thirty more. Our present list contains twenty-eight varieties not on last year's regular list, though a few of them were in the extra list offered in April.

Some of these seeds, though valuable, have been already pretty widely introduced,—many of them from this office,—and we should drop them from the present list, but for the fact that the *Agriculturist* goes to new subscribers, in many very remote places in the Territories and on the Pacific coast, who have no access to seed stores,

nor other facilities for getting any kind of good seeds. We therefore leave in the list, for such subscribers, certain kinds which would be of no account to those more favorably situated. Among these are Numbers 1, 2, 3, 4, 8, 9, 10, 16, 17, 76, 77, and some of the flower seeds.

More than fifty varieties of the seeds offered will reproduce new seed in larger quantities, the same season they are sown or planted,—the principal exceptions being the root crops and the brassica or cabbage tribe. Owing to this fact, the parcels sent out, however small, will be rapidly multiplied. But with the exception of the field seeds, the garden peas, and two or three others, our parcels will each contain about the requisite quantity desired in any one garden or flower-plot. They will generally be larger than last year.

We are absolutely obliged to limit the number to each subscriber, to three separate parcels of field and garden seeds, or five parcels of flower and ornamental seeds, for even with this limitation the expense and labor of distribution will be immense—beyond the conception, almost, of any one who has not been through with a work of this kind. We suppose the number of separate parcels sent out from this office will be tenfold greater than those sent from the United States Patent-Office, with all its resources and machinery; and the number of persons receiving them will be in still greater ratio. As the expenses of that office are greater than the entire income of the *Agriculturist*, the size of their parcels will of course be larger than ours; but for all practical purposes of introduction and dissemination, our separate packages will be about as valuable, while tenfold greater in number. We only make these comparisons to show the value of our distribution, and the necessity of limiting the individual offers.

Ought we not to be on a par with the Patent-Office in sending out seeds free through the mails? Our 250,000 or 300,000 parcels of seeds would not load down the mails more than the speeches, books, etc., sent free by single Members of Congress. (If the franking privilege be not soon abolished, we shall almost be willing to have our constituents elect us to Congress, solely that we may get a M. C.'s franking privilege. If we ever come down to that, we promise, single-handed, to go as much beyond the "Government Seed Store" in quantity, as we do now in the number of persons we reach among the "masses.") As it is now, we have no alternative but to ask those wishing seeds to forward envelopes ready directed to themselves, and marked with the number of the variety desired, with Post-Office stamps enough on them to pass them through the mails. However, owing to the largely increasing number of subscribers at most offices where we have hitherto had but single readers, it will be a saving of expense, in a majority of cases, to have the parcels go in one package by express, as noted in connection with the catalogue.

The descriptive notes, referring to the varieties, mode of planting, culture, etc., we defer to the earlier numbers of the next Volume, so that they may be in the hands of all new subscribers who do not get this number. We shall not begin the distribution until next month, but we give the list now, that persons sending in renewals, may, at the same time, forward their envelopes for seeds, and save a second letter. The January number will only be sent to those who renew, or to those whose subscription goes beyond the present volume. A special exception was made last year, in forwarding the January number to all old subscribers, owing to the financial revulsion which delayed some of the renewals for a time. This will not be done the present year.



### The Farmers' Festival Perverted.

Perhaps it will do little good, but we mean to repeat our exhortation over and over again, that agricultural fairs should not be perverted from their original and proper design, viz., to promote the interests of agriculture. It is plain enough that the attempt is being made in many quarters, to have them answer the purposes of a grand holiday, to take the place of the old "training-days," or to be a sort of second Independence Day. In many places, auctioneers, showmen, pedlars, gamblers, and humbug catch-pennies of all sorts hang about the fair grounds, begetting dissipation and vice. Drinking and betting, wrestling and fighting, follow close behind mammoth women, hogs with five legs, and nimble Jacks, to the great annoyance of all sober people, and to the moral injury of the young and inexperienced, and to the degradation of the farming interests. Female equestrianism and fast driving are a part of this perversion.

Anybody with half an eye can see where this thing is leading. It is, perhaps, swelling the numbers of those who attend our fairs, but is it not also bringing in the mob? Farmers and respectable, sober-minded country people find themselves elbowed aside by horse-jockies and "fast" people of all sorts; and, year after year, the fairs are made up less and less of those for whom they were originally established. Agricultural fairs, at this rate, will soon be run into the ground. We beg the managers of these annual festivals to look ahead, and act wisely. If all they aim at is simply to furnish "fun for the million," let them go on. But if their object is to promote an intelligent interest in agricultural pursuits, and to encourage farming, let them change their tactics.

### "Keep Cool."

It is much easier to advise than to practice calmness and patience under all circumstances, but every illustration of the advantage of "keeping cool," and the perfect uselessness of getting into a stormy passion or excitement at every adverse turn of fortune or crossing of our wishes, has a tendency to fortify and prepare us against the time of trial. Here is an item from our drawer, picked up we know not where, which strikes us as a good example. Who would not prefer the undisturbed serenity of farmer L., as detailed below, to an opposite state of feeling: One day while the black-tongue prevailed he was informed that one of his oxen was dead.

"Is he?" said the old man, "well, he was always a breachy old fellow. Take off his hide and take it down to Fletcher's; it will bring the cash."

In an hour or two the man came back with the news, "Lineback and his mate are both dead."

"Are they?" said the old man, "well I took them from B—, to save a bad debt I never expected to get. Take the hides down to Fletcher's: they will be as good as cash."

In about an hour the man came to inform him the "high brindle was dead."

"Is he?" said the old man, "well, he was a very, very old ox. Take off the hide and take it down to Fletcher's; it is worth more than any of the others."

Hereupon his wife, taking upon her the office of Eliphaz, reprimanded her husband severely, and asked him if he was not aware that his loss was a judgment from heaven for his wickedness.

"Is it so?" said the old gentleman; "well, if judgment be only taken in cattle it will be well for me, as it is the easiest way I could settle my account."



"THE FOX OAK."

We present herewith a very accurate sketch of the "Fox Oak," as it appeared in October last, before any of the leaves had fallen. Though less noted than the "Monarch Oak" of England, or the "Charter Oak" of Connecticut, it is especially interesting to the denomination of Friends, or "Quakers," since under its shade George Fox, the dauntless founder of the sect, preached in the year 1672, when on a visit from England—there being no house in the vicinity large enough to accommodate the assemblies drawn together by his fame and eloquence. At three feet above the ground the tree is 13½ feet in girth, or about 4½ feet in diameter. Another tree of similar dimensions stood near it until September 25th, 1841, when it quietly fell without any apparent cause, save a light afternoon breeze. From the number of rings in the fallen tree, the standing oak is judged to be over 400 years old. A part of its branches are dead, but it still appears strong and vigorous. It stands on Bowne Avenue, in the village of Flushing, Long Island, some ten miles east of New York city. The view is taken from the southeast. Just beyond the clump of trees, in the back-ground, is the residence of the well-known Captain Peck, of the Hudson River steamer, "Isaac Newton." A little further on, at the head of Bowne Avenue, is the residence of Samuel B. Parsons, Esq. On the opposite side of the avenue, a little to the north, is the noted "Bowne House," erected by John Bowne, in 1661,

which is still standing in good order, and contains many interesting relics of the olden time. A few hundred yards to the northwest of the tree are two Friends' Meeting-houses. The newer one is occupied by the Orthodox Society. The older one has been occupied by the Hicksites for some thirty years past. This was erected in 1695, and though 163 years old, will, from present appearance, serve for another generation. The British troops were quartered in it during the Revolutionary war.

INCIDENTS.—At the time of Fox's preaching in Flushing, the New York Colonies, then called New Netherlands, were under the dominion of the Dutch West India Company in Holland, Peter Stuyvesant being governor. In December, 1657, he, with his council, issued an order to the people of Flushing, or Flessingen as it was then called, forbidding them to entertain or countenance Quakers, and requiring them to apprehend and send to the city any who professed or preached their doctrines. Many of this persuasion had settled in Flushing, and this intolerant order met determined opposition, not only from them, but from many who from a sense of justice made common cause with them. Among the most influential of the latter class was John Bowne, above referred to, who received Fox into his house, allowed him to hold meetings there, and under the shade of his noble oaks. For this Bowne was apprehended and fined £25 (\$100), which he



refused to pay. He was kept incarcerated in the fort at New Amsterdam for about three months, and then transported to Holland. There he made his appeal to the West India Company, and was by them set at liberty, and returned to Flushing with a letter to Stuyvesant, severely reprimanding him for his course toward the Quakers, and counselling him to refrain from persecuting measures.

For the American Agriculturist.

### Hints on Clearing Woodlands.

While fully endorsing the repeated protests of the *Agriculturist* against the universal destruction of forest trees, it is to be admitted that there are times when woodlands should be cleared. A farmer may keep, on an average, one-sixth of his land permanently in timber, and yet clear off a portion every ten or fifteen years.

It is often recommended to cut out only the old and decaying trees in a wood-lot, leaving the younger to grow and fill their place. But experience has now pretty well shown that the best way is to cut off the entire growth at once, clean and smooth, and then let the trees sprout up again from the roots, or from new planting. In cutting out large trees, the smaller are inevitably broken or injured, and in the comparative shade, few young trees spring up. It is believed that a greater amount of fuel can be got in a given time from an acre of land entirely cleared at once, than from one merely culled of its large trees. It has been found that wood-lots should be cut over once in fifteen to twenty years. For the two or three years next after cutting, the lot should be fenced in, to prevent cattle from browsing down the young shoots. Care should be taken, also, to prevent fires from spreading into such lots. Land so managed will yield from eighteen to twenty cords of good wood per acre, at each cutting.

It is important to cut trees close to the ground, whether the land is to be permanently cleared up or only stripped for the time of its trees. The best wood is often nearest the earth. If the field is to be tilled, teams can work better among low stumps than high ones; and if the trees are to grow up again, the sprouts will grow more vigorously from short stumps than long ones, and be less likely to be blown off at the base by the wind.

Now then, in this month of December, is the best time for doing this part of farm-work. Now, while the snow is light, and the cold not intense, the trees can be cut closer to the ground than when the snow is deep, and the small limbs and brush can be more easily gathered and saved.

### That Plan of a House.

A subscriber (E. A. S., of Galena, Illinois) expresses himself much pleased with the ground plan of a house which we gave in our October number. He makes also the following inquiries: "Is the house gothic in architecture? How many stories high? About what did it cost? . . . The plan is an exceedingly good one, and does credit to its inventor. Perhaps you may be induced by inquirers like myself to publish an answer in your next issue."

To which we reply, giving some items he does not ask for, but which may interest him and others: The house from which the "plan" was copied, is built in the Italian order of architecture, with a flat, metallic roof, wide cornices supported by brackets, etc., but it might as well be built in any other style. It is of wood, ceiled horizon-

tally on three sides, and clapboarded in the rear. The part containing the parlor, hall, dining-room and bed-rooms, is two stories high; the library and kitchen, are a story and a-half. The rooms on the first floor are ten-and-a-half feet high between joists; those on the second floor, nine feet. As to its cost, we cannot speak with certainty. The work was all done by the day, and few bills were long preserved. If we were to make a rough estimate, we should fix the cost at about \$3,500. Of course, a house could be built on the same general "plan" at a greater or less cost, according to the material used, and the style of finish adopted.

Whether a happier house could be got up than the one described we very much doubt.

### Hints on Farm Buildings.

BY A STATED CONTRIBUTOR.

It is a sign of improvement in the condition of farmers that they are continually adding to the comfort and appearance of their buildings. This is to be rejoiced in. It is a good rule, however, to keep the cost of the buildings proportionate to the value of the farm. Should it not be less? As to position, no universal rule can be laid down. Yet it is plain, that both house and barn should be so situated as to be convenient to the public road and to the farm itself. To set a good house upon low land, detracts much from its good appearance, and its cellar is quite sure to be wet. If placed on very high land, this may secure a dry cellar, pure air, finer appearance, and a more commanding prospect; yet it will be exposed to strong winds, and much of the teaming up and down hill will be laborious and irksome. A site midway between the two will ordinarily be preferable. In reference to cellars for fruit-keeping, we have noticed that very dry cellars are objectionable, causing fruits and vegetables to shrink and decay. A tolerably moist cellar, if cold, is preferable.

For barns, a side-hill position has many advantages. Not the least of which is, that it affords an easily made cellar, light, dry and accessible. As to keeping cattle and hogs in the barn-cellar, in Winter, we question the expediency of it. The air becomes foul and close, and of course hurtful to the cattle. It rises, also, into the barn above, and penetrates the lofts of hay and grain, and seriously injures them. Least of all do we approve of making barn cellars the place for manufacturing and storing manure. It may economise the dung-heap, but it harms the domestic animals and the hay and grain above. As an illustration of this, a writer in one of our exchanges speaks of a barn which he had made for storing manure beneath. Thinking that he had thus got things fixed about right, "he purchased a good deal of manure, and brought his lands into a high state of fertility, producing large crops of hay. This he allowed to accumulate in his barn. He finally sold his stock to be pressed into bundle-hay. Some of it had lain in the bay for three years, and when it was removed to be screwed down, it was so offensive, two or three feet from the floor, that the men employed to press it could not endure it, although the barn was entirely open, and a thorough ventilation was secured; and they were obliged to throw away portions of it." When one's barns are already made in this way, it is a partial remedy of the evil to strew the stables every day with plaster, and to mix the manure below very freely with muck, or some similar absorbent.

In building a new barn, the best way is to make the cattle-sheds distinct from the main barn, us-

ing the cellar chiefly for storing turnips, carrots, potatoes, pumpkins, and the like food for stock. In making stalls for horses, it is an excellent plan, where it is practicable, to give them a floor of earth, provided the soil is not wet. It is cruel to compel a horse to stand month after month upon a plank floor; it is uncomfortable to him, and a prolific source of disease.

Barns should be made as warm as possible, consistent with maintaining good ventilation. This promotes the comfort of stock, and is withal economical. And no barn is complete without some contrivance for watering animals close at hand. A good pump is a good thing, but a running stream or a pen-stock is better. The water from the last two sources is of just that quality and temperature which animals like, and is most favorable to their health.

### Thought-Profitable in Farming.

Perhaps there is no respect in which farmers differ more from each other than in the amount of *thought* they bring to their work. One man labors hard from January to December, yet wonders to see that he accomplishes less than his neighbor who works fewer hours a-day than he. He toils on laboriously in the same old routine, without forethought, without skill; his neighbor seeks to do everything intelligently, with a wise forecast of the best means of doing it. Suppose the first farmer wished to remove a large boulder from his wheat field. He had seen his father get rid of such rocks by calling together all his hands and a neighbor or two, and rolling it by mere muscular force into a corner by the fence. Now, he never bothers himself to inquire whether there is any better method than his father's; so he spends a whole day in getting a single boulder into a corner, and thinks, after much straining and weariness, and many bruises, that he has really done a great deed. But the second farmer thinks twice before touching his boulder. He examines its shape, size, texture. Can it be sunk out of sight, and below the reach of plow-point? Or can it be more easily rolled out of the way by good, stout levers; or will blasting do the work as quickly, and save him the pieces for future use? Having once settled the point, he goes to work with a will, and the boulder is soon disposed of. This as an example; but the same principle applies to every operation. The thinking farmer takes advantage of opportunities and means of doing things, which escape the notice of careless men. His *thought* shows itself in his house, barns, stables, pig-sty, cow-yard, ditches, fences, fields, everywhere—Spring, Summer, Autumn and Winter.

Hearken, now, to the "improvement" of our little sermon! Another season of out-door labor has closed; the year, with its toils, successes and failures, cannot now be recalled; but it can be reviewed. And let us review it. Neighbor Jones, how do you account for your ill-luck in that corn-field down in the corner lot? Is the ground cold, wet, and full of grubs and wire worms? If so, or possibly so, *think* about it before you repeat the same profitless experiment. Read and think about the effects of draining, its cost and the probable gain to your crops. Then, if you determine on draining (and we really hope you will), make yourself master of all its details, such as draining with plank, stones, tiles, and the best kinds of tile, the best way of digging the ditch, its depth, direction, its outlet, &c., &c. And so, when the season opens, you will be prepared to go to work intelligently and successfully.

And, farmer Smith, what gave you such a



rousing crop of potatoes, while neighbor Johnson's was so small? Perhaps you scattered a good top-dressing of *thought* over the land before you plowed and planted. Farmers generally need to do more head-work. This should be applied to the management of the dairy and orchard, sheep and young cattle, rotation of crops, and, in short, to all the operations of the farm.

During the leisure months of Winter, now begun, form your plans for the coming year. Make good use of the past. Review the year now closing, and see what real improvements you have made and where other things will bear a little mending. This will make your experience of great advantage. Avoid, if possible, former mistakes, and repeat the methods which have proved successful.

Draw up on paper a plan of your farm. After suitable deliberation, assign to each field its respective crop, and determine on the way the land shall be prepared for the crop. May not the old orchard be improved by re-grafting some of the trees with new and superior kinds of apples? Perhaps it is time to commence the planting of a new orchard. And what a grand undertaking is that! How it looks into the future, and what a spirit of benevolence it awakens for those who shall come after us! To determine what sorts are, on the whole, the best for a succession of Summer, Autumn, and Winter apples is no small matter, and requires no little study. These Winter months are just the time for that study.

And so, in reference to all the details of farming. Give them a careful overhauling. Don't be mere routine farmers, but have a reason for everything, and do everything in the best possible way. Put as much thought into your farming as you have to spare, and surely it will pay. It may not be amiss to turn back to page 8 (Jan. number), and read 'Squire Bunker's experience on manuring with brains.

#### Examples of how Premiums at Fairs are Sometimes Awarded.

Great care is needed in selecting judges for awarding premiums at our agricultural fairs. They should be men, not only qualified to estimate the *quality* and relative value of the particular article brought before them, but men also of integrity and good sense. Otherwise, their decisions will often run wide of the mark of justice.

As an illustration of our idea, take the following: At a county fair recently held in the interior of this State, a premium was offered "for the largest and best variety of hardy grapes raised in the open air." One gentleman exhibited seven varieties of hardy, native grapes, such as the Concord, Isabella, Diana, Catawba, Clinton, Delaware, &c. Another exhibited ten varieties, among which the only native and really hardy sorts were the Isabella and Concord; the other eight were kinds commonly raised under glass, and suitable only for such culture, viz: Black Hamburg, Zinfandel, Royal Muscadine, Child's Superb, Red Chasselas, and the like. He had managed to raise them in the open air, by dint of burying the tops in Winter, and by giving them every advantage of position and nursing in the Summer. And, after all, his grapes were not fully ripe when exhibited. Yet because he presented, literally, "the largest variety raised in the open air," he was honored with the premium.

Now, the premium itself was of little value to either gentlemen, but the principle involved was of some importance. Was it the real design of the society in offering that premium, to encourage

the growth of hot-house grapes in the open air? Was it not their object rather to foster the introduction of desirable hardy grapes? And did those judges act wisely and justly in awarding the premium as they did?

We give this only as an illustration of the thought with which we begun. In our view, judges should be governed not only by the letter of the premium list, but also by its obvious spirit and design.

The above, written by an associate, calls to mind another case that fell under our own observation this year. At a county exhibition were several very large and very fine bunches of hot-house grapes, raised by gentlemen of means and leisure, which were certainly worthy of mention. On the same table were fine specimens of the newer hardy outdoor grapes, such as everybody may raise. Accompanying the specimens were cards detailing the mode of cultivation, the yield, the adaptability to general culture, etc. Yet the fruit committee were so dazzled with the large bunches that they did not deign even to notice those less showy, but having a far higher value to the masses who were the main supporters of the society. Such facts speak for themselves; comment is unnecessary.—PUN. ED.



#### Blinks from a Lantern..... VI.

BY DIOGENES REDIVIVUS.

##### GOING TO EMIGRATE.

I am continually reminded in my journeys of observation among the farmers, that the office of critic, though an unwelcome, is by no means an uncommon task. I have plenty of help and sympathy in my work, and oftentimes the most severe criticisms upon a man's husbandry are his own statements of facts. Indeed, most men in private conversation would say much worse things of themselves and their calling than they would be willing to see in print. And this, perhaps is one of the chief advantages of these lantern glimmerings. They enable us to see farmers at home in their every-day dress, rather than fixed up for exhibition in the papers. A shade like myself begets no suspicion of "a chiel among 'em taking notes," and talk without fear of print.

It was only yesterday that I returned from a visit to Johnson, the neighbor of Higgins. Johnson is the representative of a large class of farmers in the older States. Though the owner in fee-simple of a hundred and twenty acres of soil, surrounded by a healthy family of children, he is miserably poor, and always will be unless he changes his method of husbandry. His farm is the homestead of the Johnson family, and he came into possession at his majority, twenty years ago, with only a debt of five hundred dollars for the right of the other heir to the estate. The farm was already stocked, and with right treatment of the soil, he might long ago have been out of debt, and doubled the value of the paternal acres. Instead of this we will hear his own account of the state of his affairs, as it fell from his lips.

"You never see sich a country to git a living in, in your life. It's jest like the feller going to

school that walked two steps backward to one forrards, and the more he walked the more he didn't git there. Here I've ben for twenty years or more, digging away like all possessed, working airy and late, in season and out of season, and I'll be blamed if I aint further off from being out of debt than I was when I started. Sich a terrible poor sile you never see. It is leachy as a riddle. You put manure on to it, and it don't stay long enough to say good bye to the corn you plant in it. The seasons have changed, or something else. I don't get half as much corn and potatoes to the acre as my father did, and some of the mowing lots, that used to produce grand crops of hay, I have had to turn out to pasture. Father used to keep five-and-twenty head of cattle; I have to buy hay very often to get fifteen through the Winter. My father used to lay up money here, and when he died left several thousand dollars in bank stock. I've worked harder than he ever did, and have n't even paid up the five hundred dollars I owe Betsey for her right in the farm. I am more or less in debt to the blacksmith and shoemaker, to the carpenter and the storekeeper, to Tom, Dick and Harry for things I couldn't do without. I have had to buy hay and corn, and sometimes I have been out of pork.

I can't stand it much longer in sich a country as this. It makes me mad when I think of it—working hard all the while, and eternally behind hand; not a spare dollar in my pocket from one end of the year to the other. I'm going to emigrate jest as soon as I can sell out. They say in Illinois a feller can grow a hundred bushels of corn to the acre, taters without end, and pumpkins enough to cover the ground. I should jest like to set eyes on sich a country, and get out of sight of mulleins and daisies for once."

Well, before you start, Mr. Johnson, I want you to tell me how it happens, that this land which produced sixty bushels of corn to the acre, in the days of your father, only produces twenty to twenty-five now? Your farm is a smooth, arable tract of country, that the Good Being evidently designed for cultivation, and to pay its own way. Somebody must take it when you get through with it, and it will be of service to your successor to know how it has failed.

"Can't tell anything about that. I only know that fields, which produced whopping big corn when I was a boy, wont produce anything but buckwheat now, and hardly enough of that to pay for harvesting. I plow and plant jest as father did, and put on eight or ten load of barn-yard manure to the acre, but the corn don't come, and the grass neither. I don't know what the matter is."

Why is it that your neighbor Higgins gets such fine crops of corn? I see he reports in the transactions of the county agricultural society, ninety bushels to the acre, on a field of six acres. His farm joins yours, and that six acre field lies upon the same plain where you only get twenty bushels to the acre. Is there a different climate over Higgins' fence?

"I didn't see that corn measured, and I don't believe there was as much of it, though it was a great piece of corn, no mistake. But Higgins has money and can buy as much manure as he has a mind to. I can't buy manure."

But the report says he did not use much more stable manure than you did. The rest was harbor mud and salt, and dissolved bones.

"That mud and sea-weed is good, I have no doubt, but it takes so much labor to get it, and I always have as much as the team can do without going a mile after manure."

But it pays. Ten loads of stable manure, \$10; fifty loads of mud and weed spread on the field,



\$25; six bushels of refuse salt, \$1; dissolved bones, \$4; equal to \$40 for manure. Cost of plowing, subsoiling, cultivation and harvesting, \$30; making \$70 as the cost of production, or \$11.67 per acre. Ninety bushels of corn per acre, worth \$45 at the lowest, and the corn fodder is worth ten more, making over forty dollars profit. And this is only the beginning of the difference between an acre of his meadow and an acre of yours. With twenty-five bushels of corn to the acre you get no profit, and only poor pay for your labor. Higgins will stock down his meadow with oats next Spring, and get sixty bushels of oats to the acre, and for four years after will average two and a-half tons of hay to the acre, with a good bite of after feed. You will not get over twenty bushels of oats, and will not average one ton of hay to the acre for the same period. Higgins will cut his hay and oats with a horse mower, you will cut yours with a scythe. His labor bills will not exceed yours. He will average ten or twelve dollars profit on every acre under the plow or grass. You will simply get poor pay for your labor, and a poor living.

The remedy for your difficulties is not "emigration," but in better husbandry. Your system of cultivation would ruin both farm and tenant, in any country or climate. You starve your acres, and they starve you. You only make a miserable hundred loads of manure with your fifteen head of cattle. You might make five hundred of better quality. There is a muck swamp within a half mile of your barn, and upon the borders of that light sandy plain, where it is so much needed. There is the cove with its treasures of mud and sea-weed, within a mile of your door, and you all the while growing poor and disheartened, and meditating emigration as a sort of revenge upon the soil. Make this muck emigrate to your cow-yard, and your corn-fields, and you may spare yourself the trouble of going West. Your meadows will laugh and grow fat, the tin will stick in your pocket, and the next time I call I will find you shaking your sides with Higgins over ninety acres of shelled corn to the acre.

#### Small Pens for Fattening Pigs.

This is a matter of much more importance than might appear at first glance. Our attention has been called to it by an uneasy, frisky sow, that we had occasion to purchase in September. She had enjoyed the run of a pasture during the Summer, and was thin in flesh. We put her into a large pen, about 12 by 30 feet, and though she had fattening food in abundance, she kept so constantly upon the move, that the food seemed to help her very little. She had a comfortable, dry sleeping apartment, with plenty of hay, but if she slept well by night there was no rest by day. After several weeks of this regimen, we yarded off a corner of the pen, making it about 8 feet square. Her errant propensities were cured at once, she takes her rations with decided gusto, and sleeps well between meals. There was a rapid increase of flesh and fat soon after the close yarding.

From observations, extending over a dozen years or more, made in villages and in the rural districts, we have noticed that the fattest and best pork is made in the former, where one or two pigs are usually kept in a small pen. The villager has but small room, and crowds his pig into narrow quarters for the whole year. It is fed on slops for eight months, and for the last four is crammed with scalded Indian meal. He gets pork of decidedly better quality than he can purchase, and gets it cheaper. The whole energy of the ani-

mal is forced by his training into the production of flesh and fat.

The pigs of the farmer, on the other hand, run in a pasture, or on the common, for six or eight months, and are shut up a dozen or more in a large pen to fatten, because he has plenty of room. The energy of the animal has gone very much to the development of snout and feet, and the propensity to run and to root is not circumscribed very much in his roomy pen. By Christmas he is not more than two-thirds fattened, and he has consumed quite as much as the village pig, which is ready for the knife. We have two yearling pigs, good for four hundred and fifty pounds of pork by Christmas, that have never been out of a pen, eight feet by twelve, since they were eight weeks old. Small pens, kept dry, and regular feeding is the secret of their thrift.

For the American Agriculturist.

#### A Crack in the Hog-Trough.

Some time ago a friend sent me word that he gave, every day, nearly twenty pails of buttermilk to a lot of shoats, and they scarcely improved a bit on it. Thinks I, this is a breed of hogs worth seeing—they must be of the sheet-iron kind. So I called on him, heard him repeat the mournful tale, and then visited the sty. In order to get a closer view of the miraculous swine I went into the pen, and on close examination found a crack in the trough, through which much of the contents ran away under the floor.

Thinks I, here is the type of much of the failures and misfortunes of our agricultural brethren. When I see a farmer omitting all improvements because of a little cost, selling all his good farm stock to buy bank, or railroad, or mortgage stock; robbing his land, while in reality he is also robbing himself and his heirs—thinks I, my friend, you have a crack in your hog-trough.

When I see a farmer subscribing for half a dozen political and miscellaneous papers, and spending all his leisure reading them, while he don't read a single agricultural or horticultural journal—thinks I to myself, poor man, you have got a large and wide crack in your hog-trough.

When I see a farmer attending all the political conventions, and coming down liberally with the dust on all caucus occasions; knowing every man in the town that votes his ticket; and yet to save his neck, couldn't tell who is president of his County Agricultural Society, or where the fair was held last year, I "unanimously" come to the conclusion that the poor soul has got a crack in his hog-trough.

When I see a farmer buying guano, but wasting ashes and hen manure, trying all sorts of experiments except intelligent hard work and economy; getting the choicest seeds regardless of expense, and then planting them regardless of cultivation and good sense; growing the variety of fruit called "Sour Tart Seedling," and sweetening it with sugar, pound for pound; keeping the front fields rich and neat, while the back lots are overgrown with elders, briars, snap-dragon, and thistles; contributing liberally to the Choctaw Indian Fund, and never giving a cent to any agricultural society—such a man I will give a written guarantee has got a crack in both his head and his hog-trough.

When I see a farmer spending his time traveling and visiting in a carriage, when he has to sell all his corn to pay the hired help; and his hogs are so lean that they have to lean against a fence to sustain themselves while squealing, I rather lean to the conclusion that somebody that stays at home will have a lien on the farm, and

some day the bottom come entirely out of his hog-trough. ORANGE COUNTY FARMER.

#### Chinese Sugar Cane not Poisonous.

We have said little of this crop recently, preferring to quietly wait awhile and let it prove itself. We have lost none of our first interest in this subject, though some of our jealous cotemporaries have amused themselves by attempting to depreciate or distort the motives which led us to scatter it over the country for experiment. But enough on this point. There have been some fears that the Chinese Sugar Cane is injurious to animals—even poisonous. We have constantly asserted to the contrary. Among a thousand proofs of this, we present the following communication to the Charleston Mercury, from A. G. Sumner, Esq., of Pomaria, S. C., who ought certainly to be good authority. He writes:

"I have fed this plant to all kinds of stock, as fodder, for the past season, in every stage of its growth—green, ripe, and cured. I have found it the best soiling plant I ever raised—horses, mules, sheep, swine, goats and cattle, rapidly fatten when fed on it. I fed two hundred and fifty bushels of the seed during last Winter to sheep, goats and poultry, and I attach the relative value of oats to it as Winter food for these animals. In April last I sowed twenty acres broadcast in sugar millet, intending it as a pasturage for calves and milch cows. On the first of July I turned the milch cows, sheep, goats, calves, swine and geese upon it, and have not lost a single animal. They have all improved rapidly, and although I have large numbers on the field, the herbage bids fair to keep ahead of all demands made on it. I made it a point to take my animals from good pastures, and fed them well before turning them in, allowing them plenty of salt. If a half-starved cow is turned on wheat, peas, or Indian Corn, she is just as likely to die from over-eating these crops as she is from Chinese Sugar Cane. The disease which kills hungry cattle when over fed on [this or any other] green food is termed *Hoove*, the best cure for which is a drench of salt dissolved in a gallon of water. This will relieve an animal sometimes in a minute. Peas, of all green food, is the most dangerous, from the flatulent nature of the plant. I have frequently seen half a dozen cows die in a few hours after they were turned into a luxuriant pea field in the Fall, and have as frequently seen others relieved by the above dose. A cow which, like the asses of Ephraim, had been feeding on the East wind during the Winter, and grazed upon the roadsides and bushes, might be expected to die from joy after an overfeed of sugar millet. I have sowed broadcast at the rate of one and a-half bushels of sugar-cane seed to the acre, a meadow which I intend to convert into good nutritious hay for Winter food. I think more cows will die for the want of this food in our State than from being over-fed on it. I do not think, with the proper precautions, it is in any way more dangerous than any other green food we are accustomed to feed, and would advise its extended use as a soiling and hay crop in the South.

The mist that hangs like silver curtains around the plains before sunrise, and is lifted by day's golden cords out of our sight, has death in the woof; it is woven here and there of fatal threads.

The water that has no taste is purest; the rain that has no odor is freshest; and of all the modifications of manner, the most generally pleasing is simplicity.



### Habits of Bees—"Piping" of Queens, etc.

In reply to my statement in August, page 238, that I had the present season, heard a queen piping in a swarm out only four days, Mr. Quinby, in the September number, page 269, suggests that I must be mistaken, and that the piping may have been in an adjacent old stock. I am happy to inform him that no such mistake was possible. 'There were none but very young swarms within fifty yards of the one whose queen was heard piping on the fourth day after swarming. The owner had placed this year's young swarms in a new apiary by themselves, and the naughty queen who piped contrary to the "rule in such cases made and provided," was in the last swarm that had issued at the time of my former writing. Her piping continued two or three days, and was heard by several intelligent witnesses with me. Mr. Quinby may rest assured that my statements are facts, capable of abundant proof by competent witnesses. An attempt to cast doubt on carefully observed facts is a very unsatisfactory explanation.

His statement, that by having hives in readiness the bees will "expect" good quarters, and so will cluster before leaving, needs no remark to enable an intelligent reader to appreciate its worth. There is no lack of care among beekeepers *here* in that respect, and yet many swarms will go off.

Another queen has been "cutting up," as the boys say. A large swarm came out in the morning, was hived as usual, and placed about two feet from a swarm a week old. In the afternoon of the same day I saw the newer swarm leave their own hive and crawl into the hive containing the swarm a week old. They met no resistance, and the two united and filled the hive to overflowing. They were divided by the owner, half of the bees being put into a new hive, the queen going with them (proved by the presence of eggs and young bees in due time). A finished royal cell was inserted in the other hive, which, of course, according to authority, contained no queen. In seven days vigorous piping was heard in this stock by myself and others. How can this be reconciled with the theory that piping only occurs when a hive contains a plurality of queens?

Perhaps it may be regretted that bees in our region do not demean themselves according to current theories, but it can not be helped. I am a lover of nature, and shall continue to observe for myself and seek information, whether my inquiries meet with the courtesy due from gentlemen or otherwise.

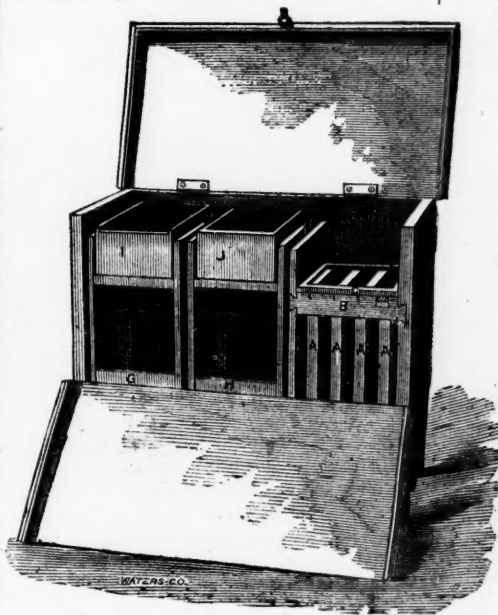
S. C. MENDENHALL.

Frazeysburg, O , Sept. 10th, 1858.

REMARK.—The above was received in due time, but its insertion delayed, partly for want of room, and partly because it appeared to partake of the nature of a personal controversy—for which, be the way, we have not a spare line, and which we cannot admit into these columns. On re-reading Mr. Quinby's letter, page 269, we find he did—hastily, doubtless, and without meaning personal disrespect—question the facts stated by Mr. Mendenhall. Their publication in this journal should have shielded them from such suspicion, without some very strong positive reason, and Mr. Mendenhall is justly entitled to space for the above reply. We hope all personal allusions will drop here. Both gentlemen are intelligent, careful observers, and we trust they will each continue to gather and furnish for publication facts interesting and useful to all lovers of the sweet-producing insect, which is an especial favorite with all of us.—ED.

### Bee Hives—Improvement in Honey Frames.

Our readers know that we give "Patent Beehives," of nearly all kinds, a pretty wide berth. Almost all of them have some peculiarity which is an advantage, theoretically at least, but there has been so much humbug in the matter for several years past, that the word "Patent" upon a hive is a mark of condemnation for most persons. We have already illustrated the simple unpatented glass honey box used by Mr. Quinby, and have also described and approved the patent movable honey frames used in Langstroth's hive. We now find an apparent improvement upon these movable frames, patented only a few days since (Nov. 9,) by Mr. Phelps. The main features of this improvement are shown by the accompanying engravings.



**Fig. 1.**

*Fig. 1, is one of the Phelps's hives, with the top and back opened to show the internal arrangement. The ends of the improved sectional frames are shown at A, A, A, A.*



**Fig. 2.**

**Fig. 3.**

**Fig. 4.**

*Fig. 2*, is a side view of one of the frames, A, taken out. Inside of this are four smaller frames E, E, E, E, each one of which is about 5 inches square. *Fig. 3* is one of the smaller frames taken out. *Fig. 4* shows several smaller frames, E, E, E, E, arranged in a box to be placed in the top of the hive, when desired.

The advantage of these small frames, placed in any kind of hive, is, that the honey is deposited by the bees in small pieces of comb, say 5 inches square, which is a very convenient size for taking out to place upon the table, without disturbing the remainder of the comb in the least. In manipulating with bees, also, the different frames, A, A, or E, E, can be removed, replaced, or shifted as may be desired.

We do not describe the other portions of the hive, as we are not disposed to commend or con-

demn it as a whole. There is, however, an other peculiarity worthy of notice. The frames A, A, A, can be shut off from the main body, H, & G, and then, by inserting a long tin *exit* tube, the working bees will go out of the apartments containing the honey frames, and in returning will enter the main body through a more open aperture. In this way the bees can be soon cleared from the honey, leaving it free for removal, without resorting to smoking, driving, or any other operation.

## Hunting Wild Bees.

J. W. H. inquires for instruction in hunting wild bees, which abound in many sections of the country. We have had no recent experience, but remember several successful bee hunts when a boy at the West, and we could enjoy such an excursion now-a-days. The whole operation in olden times consisted in going out to a field with a basin or box of honey, at a time when the bees were out at work. The honey was set upon a stump or log, and soon attracted a number of bees.\* Various mints and essences were by some supposed to attract bees sooner. As fast as they filled themselves with honey they started off in a straight line for one or more distant points. A "line" of bees would after a time be formed, and by taking a number of objects as a guide, it was not difficult to trace the bees to their home in a tree. Not unfrequently the "line" would lead a mile or two, or more, to a neighbor's bee-house. When a "bee-tree" was discovered, it was kept a secret until after the honey gathering season was over, when the tree was cut down, the bees killed by burning straw, and the honey collected. Sometimes, when the tree was of suitable form and size and had fallen unbroken, the entrance was closed, a section of the trunk cut off above and below the swarm, and taken home and set up for producing future stocks.

Not unfrequently two or more persons would discover the same tree, and each keep the secret. The party first on the ground would, of course, get the honey. We have known two parties chance to meet at the same hour to cut down a tree. Then there would be a dispute as to priority of discovery, and sometimes the discussion was settled by a union of forces for the attack, and a subsequent equal division of the spoil. A more common difficulty, as the country filled up, was the ownership of the tree claimed by the owner of the land, from whom the tree could not be purchased at a price low enough to warrant the finder in buying and cutting it down. Not unfrequently the tree was cut down "on the sly," and many a law-suit has resulted from such an operation. These difficulties gradually put an end to bee-hunting, as a country is settled and timber becomes valuable.

\* Sometimes the bees will not come to the honey in the box. When this is the case catch one or two, or more, from flowers, confining them upon the honey by covering the box with a piece of glass, which should be taken along. They will soon fill themselves when they may be let go. They will frequently return with a host of companions in the course of an hour or two, and a constant "line" will soon be formed.

Genius has limits, virtue has none ; every one pure and good can become purer and better still.

For the American Agriculturist.

## Notes on Prairie Farming.

I promised to tell the readers of the *Agriculturist* how prairie farmers harvest their grain, particularly here in Illinois. I have waited until this time, when I have more time to write, and your readers more time to read. The severe hail storms, long continued rains, and hosts of insect enemies left to some farmers little or no wheat to harvest the present year. The wheat crop is much below an average in Illinois this year; yet the market price, strange to say, is down to nothing, almost.

Without the aid of reaping machines it would be impossible to save sufficient grain in Illinois to bread the people of the State. Of these machines there are a great many different kinds used; McCormick's, Atkins', Manny's, Seymour & Morgan's, Rugg's Illinois Harvester, and Haine's Header being, I think, the principal makers patronised. Some of these are self-rakers—such as Atkins', and Seymour & Morgan's, and hence require but one person to drive the machine. Haine's Header requires three wagons to carry the grain to the stacker at once.

When harvest approaches the farmer is frequently nonplussed for hands, and in a majority of cases gets but indifferent ones at enormous wages. The grain is usually cut and bound, and shocked up at the same time—the binders following the machine and keeping up. Some farmers thresh their grain from the shock, the machine being placed in the middle of the field, and the grain hauled to it in wagons. It takes three wagons to keep a good machine, worked by eight horses, running. One horse to haul away straw from the separator, and a hand—usually a boy—to drive him. It takes, provided the farmer owns the machine, eight horses for the thrasher, six for three wagons, and one to take away straw. Hands: one to pitch to the wagons (it requires a number one hand to keep them going), one to each wagon, one to drive the horses in the power, one to cut bands, one to feed the machine, one to attend machine and measure grain, one to sack the grain or put it in the pen, and one to drive the horse that draws away straw. Should the machine be hired, the usual charge per bushel for threshing is six cents—the owner of the machine finding six horses and three men, and the farmer supplying the remainder. The grain is usually put into rail pens lined with straw, and covered with straw when full. Grain thus put up is generally secure from the weather, but rats and mice keep continual Thanksgiving therein.

Few farmers are in a condition, pecuniarily, to hold on to their grain any length of time. Their necessities compel immediate sale at any price. In more than half this is caused by the credit system, running up large store bills, half of which could be dispensed with. Some farmers have granaries and keep their grain well secured from thieves and weather. The middle-men, or grain-buyers, at the railroad stations and small towns, furnish sacks to be used in hauling it in to the warehouse. Few farmers have their own sacks properly marked.

The straw is either stacked up, or a part of it, for Winter use for stock, or burned in the field, or left scattered all around the place where it was threshed, till it is found to be in the way, then burned.

The threshing is frequently—nay, in more than half the cases—deferred until the grain is stacked. The stacking is done soon after reaping, as the circumstances of the farmer permit. Many farm-

ers think it best to stack and leave the grain in the stack for a few weeks to undergo a sweating process, which they think benefits the grain. When threshed either in the field or at the stack, the operation is usually a hurried one. The farmers are at much expense in feeding so many extra hands, and the housewife is sometimes in no very good humor when she has so many mouths to cook for.

The waste of grain in cutting, shocking, stacking, and threshing is, in the writer's opinion, all of twenty per cent. There is, in fact, sufficient grain wasted in Illinois every year to feed some of the small States. The grain is frequently left in the shocks till it is injured by sprouting. Storms prostrate many shocks, and thus much grain is lost. The fields are generally so large that the grain becomes dead ripe before it is all cut. All handling of such grain makes waste. Shocking, pitching to and from the wagons, and in threshing. It is one continued hurry from the time the reaper starts until it is all cut; then the threshing is done in still more of a hurry. Want of order and economy characterise the harvest in nearly all Illinois, and this year, I think, farmers are opening their eyes to it.

Thousands of tons of straw, which might be put to useful purposes, are yearly burnt. The animals of these same farmers stand all Winter shivering in the cold, when a few poles and plenty of straw would make a comfortable shed and shelter.

Time and example will alone cure these evils. The change is commencing, and when every farmer in Illinois reads a good agricultural paper, and learns to think and reason more, then we shall see things as they should be.

Very many farmers are reducing the number of their grain acres, and going more into a mixed husbandry, this in itself leading to better management and order. It would be matter of surprise to Eastern farmers to witness the large extent of acres in small grain in the West; to see the heedless manner of cutting and securing the grain, and to still further wonder where all the grain goes, and why more money does not come back. A short acquaintance, however, with Western farming, as it is, would soon unveil the mystery.

My sketch is rather hurried and imperfect, but to the letter true. H. H.

Prairie Cottage, Christian Co., Ill., Nov. 1st, 1858.

For the American Agriculturist.

## Feeding Corn Stalks—Muck—Manure.

With a common old-fashioned, lever cutting-box, I cut my stalks as short as circumstances may require, or time will allow. This is very rapidly performed with the assistance of a boy to hand up the stalks, eight to a dozen at a time, and may be done on a rainy day, or in the evening. When cut up, twenty or thirty bundles of stalks will pack into a very small corner. The cattle or horses will then eat them more easily. The refuse stalks with muck make good bedding. The refuse stalks, muck, and droppings next go into the hog pen where they are thoroughly manufactured, with an occasional load of muck added. It comes out five or six times a year in a fine state and in first-rate condition for further composting, as it has been kept under cover and has not been leached by rains. It has still heat enough to ferment further when mixed with more muck, as it should be. I allow a small load of muck, weekly, to each two head of cattle or horses, and in this way secure a large amount of valuable manures.

WHISTLER AT THE PLOW.

## Poisoned Cattle.

C. Foote, Medina Co., Ohio, thinks the poisoning of cattle mentioned last month, on page 328, resulted "from the ergot which grows among the seed of the June grass," and he gives as a "certain cure," to "bleed the cattle thoroughly in the neck." He says he could give a long chapter of his experience. This is not quite satisfactory—for first, does "ergot" grow on June-grass? and second, we are in doubt as to the mode or efficacy of "bleeding thoroughly in the neck," unless he means such bleeding as butchers perform—which would put an end to the disease by putting an end to the animal's life.

## Profit of Poultry.

"G." of Pittstown, Me., (we have his full name of course) gives us the following result of careful experiments, every item of expense being charged and credit given at the market price, for eggs and poultry sold or consumed. No account was made of feathers and manure—the latter amounting to a considerable sum. The feed consisted principally of whole corn, with occasionally a little barley, offal meat, and broken bones, all charged for. Free access was had to water, and milk when it was abundant.

1st year. Cost of 7 fowls, Feb. 17th (crosses of Cochin China, Shanghai, Dorking and Spanish, of different grades).....\$ 7.00  
All expense of keeping one year..... 9.08  
Total outlay.....16.08  
Eggs and chickens eaten and sold.....\$13.12  
Value of Stock on hand at end of year..... 14.00  
Gain above all expenses.....\$14.04

2nd year. Stock \$14; expenses, \$21.83.....\$35.83  
Received for Eggs and Poultry.....\$32.47  
Stock on hand at end of year..... 19.00

Net gain, second year.....\$51.47

During the whole two years there was but a single day in which no egg was laid—which was remarkable, considering the small number of fowls.

## A WIFE NECESSARY TO POULTRY RAISERS.

Appropos to the above, we add from our drawer an extract from a business letter from Jabez Jenkins, jr., of Philadelphia: "...The young man who asks in the January number, page 12, how to make poultry profitable, ought to be informed that there is no use in his trying while he is a bachelor. I have a relative who farmed it awhile in that condition, and had a housekeeper who thought she knew all about chickens; but he has since married a wife from a family which takes to poultry as naturally as a duck to water, and it would astonish that "Connecticut Yankee" to see the big fellows now raised by my friend—16 and 18 pounds to the pair...." [A hint to the bachelors surely.—Ed.]

## A new Chicken Disease.

To the Editor of the American Agriculturist:

A very curious poultry disease came under my notice last Summer, which I thought might be of interest to some of your readers. We found a chicken so bloated up that its head was drawn upon one side, and looked as though the whole skin was stretched away from the body, and very transparent, as though the fowl had the dropsy. On puncturing the skin the wind whistled out so that it was heard at the distance of several feet. We pricked it with a needle in two or three places, so that the air all passed out, and by repeating the operation a few times, the chicken was cured, and is now one of the choicest fowls we have.

M. E. TANNER.

Rockland Co., N. Y., Nov. 10, 1858.



### Habits of Gophers, etc.

To the Editor of the American Agriculturist:

Mr. P. Bailey, who writes in the August number of the *Agriculturist*, can not have had as good opportunities to observe the method by which the gopher prepares its burrow as we have. We can take them with a small steel trap every time we try, and therefore do not permit them to destroy our garden. We have several times made pets of them, putting them into a barrel about one-third filled with earth. It is very amusing to see how soon they will dig a hole which will hide them from view. They make no use of their pocket or sack for that purpose; but after they have loosened a parcel of dirt, whirl round quickly, and raising their fore paws, push it abreast, and when they reach the entrance, give it a throw which sometimes sends it to the distance of two feet. When they reach the bottom of the barrel, they return and close the entrance, and seem to consider themselves quite secure.

If we were near an Express line, I should be more than half tempted to send you a pet gopher, that you might have the pleasure of witnessing its operations. It would probably keep fat on a few turnips while riding in a box of dirt to New York.

We are editing a "family paper" according to your suggestions, and find it profitable. A thousand thanks for the "Green Lanes of England" picture and music, in the *American Agriculturist*.

LABAN HASSETT.

Howard Center, Iowa.

[If it happens to be convenient at any time we shall be pleased to have Mr. Hassett forward a pair of gophers, male and female, that we may not only observe their habits, but also take their portraits and show them to the readers of the *Agriculturist*. We purpose to illustrate with engravings a great many animals, plants, and other objects peculiar to particular sections of the country, in order to make others better acquainted with them.—ED.]

### Tim Bunker on Beginning Life.

A PEEP AT THE SHADTOWN PARSONAGE.

MR. EDITOR:

It is well that you are a good hundred miles out of Hookertown about these times. Since that picture on "gal horse-racin" come out, there has been a good deal of talk—and some swearing or more. Up in Smithville, I guess there has been more. I was up there last week, and fell in with Colonel Lawson, who got up the race. He come up to me in the street—looking as red in the face as a beet, and about as mad as a March hare, and says he,

"Old Bunker, did you write that mess of stuff in the paper about the Fair?"

"I did, them's my sentiments, and I can't back down on 'em any where."

"Wal, who the witchcat got up that picter on the gals, with their bonnets off, and myself holding the stakes? The piece was bad enough, but that picter was all-fired mean, and immodest. It want fit to be decent. I shall prosecute the publisher for libel."

"Libel man! Why, was'nt the picter a true bill, according to facts?"

"A true bill! That's what I have to complain on. It was altogether too natural. There's Wilcox's gal, with her bonnet flyin, feathers and all, and a feller with his pocket-book out, that they say was meant for me. I can't go any where among decent folks, but what they are sticking Judd into my face, and inquiring with a smothered sort of grin, "Wall, Colonel, have

you seen the last *Agriculturist*?" I'm gettin' tired on't, and if there's any law in the universe I'm bound to prosecute."

"Keep cool, keep cool, Colonel. The least said is soonest mended. Folks, that put their daughters up for a show, have no right to complain if they are showed up. Folks whose pocket books are emptied shouldn't go to law—good morning Colonel."

They say he lost a thousand dollars in bets, at the Fair, and I guess you are about as much in danger of being prosecuted, as you are of getting into the poor-house, by publishing the paper. I am sorry for the girls that have made such a beginning of life. Caught by the tinsel of silk dresses and bonnets, they were drawn into a false position, that will very much damage their prospects for life.

And this, perhaps, is as common a failing among farmers as it is among city people. They begin life wrong, and start in business on a bigger scale than they can hold out. They buy a big farm, generally twice as much as they can pay for, and then they are always short on't for capital to work it with. It is pretty much like Deacon Smith's singing at the evening meetings; he pitches his tune so high at the outset, that his voice breaks into a screech before he gets through, and nobody can follow him. His wind is all used up before the psalm is half sung. The farmer, instead of getting good serviceable cattle, will often buy fancy animals, at a high price, a yoke of cattle for two hundred dollars, and a fast horse for three or four hundred. He don't stop to think how he's coming out.

And then if his wife begins in the house in the same way, it makes a mighty uncomfortable concern. There was Tom Spalding and his wife began to keep house about the time I did. Tom was a little fast, and his wife was a little faster. She was handsome, fond of company, and must dress and live in tip top farmer's style. The farm, Tom bought, had an old house on it, but 'twas comfortable, and would have lasted ten years without laying out a dollar on it. But she must have it fixed up, inside and out, before they moved in. So Tom put on an addition, and new clap-boarded, and painted, and papered, and hard finished, and by the time he got through, it about finished him. She must have extravagant carpets, and furniture, and a fine carriage to ride in, and every thing to match the fine house.

When Tom got through with his fitting out, he found himself fifteen hundred dollars in debt. The farm was a good one, and produced grand crops, but with all he could do, the balance was on the wrong side at the close of every year, and at the end of a dozen years they had to sell out, and emigrate. You see, the silk dresses and other women fixin's kept him in debt, and he had no chance to buy more stock, when he needed it, or to hire as much labor as he really needed, to carry on the farm to advantage. It is of no use to begin life in this way. If he had lived in the old house a few years, and waited for the finery until he had the cash in his pocket to pay for it, he might have been in Hookertown to this day, and as thriving a man as there is in it. "Pay as you go," is the true principle for every thing that isn't necessary. A man may incur debt for a part of his land or stock, or for the tools of his trade. But he might as well go to the poor-house as to run in debt for fine clothes, and a splendid house. Better sleep on a pine bedstead, till you are able to pay for mahogany.

I have talked this doctrine over so much in my family, that I guess the children have got it all by heart. Sally has, I am certain. I suppose your readers would like to hear how she is getting on,

over to the parsonage. Most stories end with the wedding, as if folks were of no consequence at all, after they got married. But as I am only writing a statement of facts, about things in the land of steady habits, you must expect to hear of people after the honeymoon.

I felt bound to give Josiah and Sally a good setting out, for folks in their circumstances. There is some parsonage land, that Josiah knows how to make use of, and they have to live among farmers, and in plain farmer style. Now I hold, that a minister is bound to be an example to the flock, in his style of living, as well as in his morals, and in his religious duties. I have noticed, time and again, that example was a grand thing to put the nub on to a sermon. If a man preaches from the text, "Owe no man anything," and drives a fast horse that he hasn't paid for, somehow the two things don't seem to hitch together. I have known extravagant living to drive some ministers from their parishes. They got in debt, got discontented and soured, and were "not content with such things as they had," until they were able to get better. I didn't want any such trouble in Shadtown, and I knew a good deal depended upon beginning right. I gave Sally a piano, but I sent along a churn with it, to remind her that the cream of life was not all music. There was a lot of cane-bottom and mahogany chairs, but John slipped in a couple of milking stools, of his own make, as a sort of hint, I suppose, that all the sitting was not to be done in the parlor. On top of the dresses in the trunk, I noticed a pair of checked aprons. I guess Mrs. Bunker knew where they came from. I had to get a new carriage for Sally's Black Hawk horse, but I sent down the next day a horse cart, with a lot of farm and garden tools, as a sort of insinuation that horse-flesh would sometimes be needed out of the carriage. The useful was pretty well mixed up with the sweet, in-doors and out. From all I can learn, the people are pretty well suited with the young folks, and with the arrangements I have made for them. They haven't got anything but what they can afford, and nothing that they don't want to use, and that, I take it, is about the whole pith of beginning life right.

Yours to command,

TIMOTHY BUNKER, Esq.

Hookertown, Nov. 15, 1858.

### Do Rats Reason?

To the Editor of the American Agriculturist:

The following item may help to answer the above question. One of my workmen recently set a noose before a rat-hole, at evening. During the next day he observed a pile of papers near the hole, with something moving beneath, and found there a rat caught by the noose. An examination proved that the papers under which the rat was concealed had been brought from another story in the building. Thus it appears that the poor fellow's companions had endeavored to conceal him until they might effect his release. This certainly looks like reasoning.

JAMES QUARTERMAN,

New-York, October, 1858.

A writer in one of our medical reviews says, that if a cow is diseased the milk is necessarily diseased too. Prentice says that the common treatment of diseased milk is the water-cure.

Men cannot expect to take pleasure unless they are willing to take pains.

"Yours is a very hard case," said the fox to the oyster

AMERICAN SPARROW-HAWK, (*Falco sparverius*.)

Engraved for the American Agriculturist.

The above engraving presents specimens of a bird which will be at once recognised by most if not all of our American readers, as it abounds in all the northern States and Territories, and is found, we believe in all the southern States. The true name, Sparrow Hawk, (*Falco sparverius*), is adopted in some localities, but so far as we have observed, it is more frequently called the Chicken Hawk, or Pigeon Hawk. The female is about 11 inches long from beak to end of tail, and measures nearly two feet from tip to tip of the wings

when fully expanded. The wings are longer and stronger in proportion to the size of the body, than those of the common hen-hawk. The male bird is a little smaller than the female.

The head is a bluish ash color, with a reddish crown. Around the head is a whitish border containing seven black spots. The back is a reddish bay with cross stripes of black. The underside of the body is yellowish white, streaked with brown. The quill feathers of the wings are black, spotted with white; those of the tail are

reddish bay, with a broad black band near the end, and a yellowish white tip. The two outer tail feathers are nearly white. These different colors give a beautifully variegated plumage. The beak or bill is light blue, tipped with black; the legs yellow, and the claws blue-black. The male and female are much alike.

The sparrow-hawk constructs its nest in a high hollow or crotch of a tree, usually where some branch has been broken off, in which are deposited four to five eggs of brownish yellow color, dark tinted. Wilson, the great American Ornithologist, who devoted his life to the study of the birds of this country, gives an animated account of the Sparrow-hawk, which will please every reader. He says: "... It flies rather irregularly, occasionally suspending itself in the air, hovering over a particular spot for a minute or two, and then shooting off in another direction. It perches on the top of a dead tree or pole, in the middle of a field or meadow, and, as it alights, shuts its long wings so suddenly, that they seem instantly to disappear; it sits here in an almost perpendicular position, sometimes for an hour at a time, frequently jerking its tail, and reconnoitering the ground below, in every direction, for mice, lizards, etc. It approaches the farm-house—particularly in the morning—skulking about the barn yard for mice or young chickens. It frequently plunges into a thicket after small birds, as if by random; but always with a particular and generally with a fatal aim. One day I observed a bird of this species perched on the highest top of a poplar, on the skirts of the wood, and was in the act of raising my gun to my eye, when he swept down with the rapidity of an arrow into a thicket of briars, about thirty yards off, where I shot him dead, and on coming up, found a small field-sparrow quivering in his grasp. Both our aims had been taken at the same instant, and, unfortunately for him, both were fatal. It is particularly fond of watching along hedge rows and in orchards, where small birds usually resort. When grasshoppers



are plenty, they form a considerable part of his food." The remainder of its sustenance is made up of small snakes, lizards, mice, and birds, and it rarely eats anything that it has not killed for itself, and even this is occasionally rejected, if out of condition. In illustration of this, Wilson relates the following anecdote:—"One morning, a gentleman observed one of these hawks dart down on the ground and seize a mouse, which he carried to a fence-post, where, after examining it for some time, he left it, and, a little while after, pounced upon another mouse, which he instantly carried off to his nest, in the hollow of a tree hard by. The gentleman, anxious to know why the hawk had rejected the first mouse, went up to it, and found it to be almost covered with lice, and greatly emaciated! Here was not only delicacy of taste, but sound and prudent reasoning. If I carry this to my nest, thought he, it will fill it with vermin, and hardly be worth eating." The voracity of this hawk may be imagined from the circumstance, also related by the great American ornithologist, that in the stomach of one of these birds, he found the greater part of the body of an American robin (*Turdus migratorius*), "including the unbroken feet and claws; though the robin actually measures within half an inch as long as the sparrow-hawk."

The blue jay (*Garrulus cristatus*), a very common bird throughout the United States, is one of the greatest enemies of the sparrow-hawk—at least as far as most vociferous attacks of the tongue may be regarded as signs of enmity. Like all his congeners, he has the greatest facility in imitating sounds; and when disposed for a little quiet fun, can mimic the notes of other birds with such exactness as to deceive the most practiced ear. He appears to be particularly fond of teasing the sparrow-hawk with his garrulous nonsense, imitating his cry wherever he sees him, and squealing out as if caught; this soon brings a number of his own tribe around him, who all join in the frolic, darting about the hawk, and feigning the cries of a bird sorely wounded, and already under the clutches of its devourer; while others lie concealed in bushes, ready to second the attack. But this ludicrous farce often terminates tragically. The hawk, singling out one of the most insolent and provoking, sweeps upon him in an unguarded moment, and offers him up a sacrifice to his hunger and resentment. In an instant the tune is changed; all their buffoonry vanishes, and loud and incessant screams proclaim their disaster."

A much smaller bird than the jay, however, is able singly to drive this depredator from his haunts, at least during the breeding season, when affection for his mate and young prompts him to exert all his powers and dare every danger to save them from the destroyer. This is the king-bird or tyrant-flycatcher (*Muscicapa tyrannus*), a bird of passage in the United States, whose dauntless courage makes even the eagle fly from his attacks.

The rain which we shake from our feet may be metamorphosed into a mulberry leaf, and ultimately revisit them in the form of silk stockings.

The religion that costs us nothing is worth exactly what it costs.

Reason, like polished steel, must be kept bright by use, or it will rust.

Self-denial is the most exalted pleasure.

Scorn to do a mean action.

Dogs of every kind, setters, pointers, bulls, Newfoundlands, mastiffs and terriers, are all lap dogs—when they are drinking.

### Girdling the Grape Vine.

The rules commonly given in our fruit books and magazines for pruning the vine, both in Fall and Summer, will answer for all ordinary purposes. Whoever follows them faithfully, may expect to gather good crops of grapes. Yet, it sometimes happens that one wishes to cultivate a variety which does not quite perfectly ripen in his climate; or he wishes to grow a few bunches of some sorts of superior size for exhibition. He can accomplish both of these ends by girdling or ringing his vines. The fruit will mature a fortnight earlier under this process, and the berries will be enlarged to nearly double their ordinary size and weight.

This practice was tried more than a century ago on fruit-trees in France, but it does not seem to have ever become general. Some American pomologists have also tried the experiment of ringing fruit-trees—apples and pears, especially—and with considerable success. In some cases their trees have been injured by the process, owing, perhaps, to carelessness in making the incisions, or in doing the work so late in the season that the wound could not heal over. It is on the vine, however, that the best effects of this practice have been witnessed. And these are so obvious and certain, that in many parts of France and England ringing has become a part of the settled culture of the vine.

The method is as follows: Watch for the time when your grapes have become of the size of No. 2 shot. Supposing that you prune upon the Hoare, or long-rod system, select those rods which contain some of the finest clusters, and with a pruning-knife having a smooth edge and a hawk's bill, cut out a circular section of the bark, about half an inch wide, and remove it. Be sure and cut deep enough to reach the sap-wood all around the branch, and take away every particle of bark, inner and outer. If the operation has been thoroughly performed, a callus will form on the upper edge of the ring, and it will appear something like the annexed cut: The sap of the vine is not checked at all in its upward circulation, but in its downward, and then contributes to the perfection of the clusters above the girdle. If the ring is made in about the middle of a rod, one will easily see the difference between the clusters above and below it.

Some may object to this practice on the ground of its being unnatural, and of its injury to the branches girdled. But we by no means recommend it for vines pruned on the Spur-system, nor would we advocate it as a general practice in a vinery, whatever may be the system of pruning. But for late bearing grapes, and those trained on the renewal system, it is entirely unobjectionable, because the rods so used are to be entirely removed in the Fall-pruning whether girdled or not. It is indeed often performed in France on spur-pruned vines, by making the ring just above the bud left for next year's fruit branch. If the ring is made so small that it can heal over before Autumn, the bud so left will not be much injured, nor will the fruit above the ring be much improved. This practice is not, on the whole, to be recommended. But on vines trained upon the renewal method it is well worthy of adoption.



And then, to girdling must be added thinning out the berries and bunches.

"This practice of girdling (says Fessenden) may be kept up from year to year, and give you a succession of ripe fruit from the first of September to the close of the season. The fruit on those branches which are not girdled will ripen the latest, of course, but neither these nor those which have been girdled should be shortened, as is customary on vines not thus treated."

### Pruning Grape Vines.

To the Editor of the American Agriculturist

Having made pretty extensive observations upon this subject for some years, I am fully persuaded that grape vines ought not to be pruned later than October. When pruned during the Winter, more or less of the remaining vine will be killed. I have, on two occasions, lost a large quantity of vines which I attributed to Winter pruning. Prune in October, leaving a surplus of three or four inches next the vine which will protect it from injury by freezing.

But my principle object in writing, is to correct the too prevalent idea that the vines should be very much thinned out, and shortened to six, eight or ten feet in length. I have, for several years past, permitted my vines to run off horizontally, up the sides of buildings or into trees, as was most convenient—to almost any extent. I prune my vines as I do my apple trees. When the limbs, or vines are too thick I remove but never shorten them. The great art in raising the grape consists in the proper management of the root. Where vines are permitted to stretch off in this way the bunches will be larger, of a finer flavor and ripen earlier the further they are removed from the root. By pursuing this course I find that a thirty feet vine, sustained by a good healthy root, produces more than three times as much fruit and of better quality, than a vine ten feet in length. I refer to the Isabella variety which I am cultivating.

Bradford Co., Pa.

W. WATKINS.

### Best Market Grapes for Glass Inclosures.

To the Editor of the American Agriculturist:

I have been building a stone house, with the roof projecting two feet on the south-westerly side. Within and along that space, I desire to set such grape vines as will mature fruit, with a glass front to protect from frost and retain heat. I wish to plant such kinds as will give best returns in market, and ask your advice as to variety, distance apart, and treatment.

B. H. DEWING.

North Chelsea, Mass.

REMARKS.—The Black Hamburg will probably thrive in such a situation, and is a fine market or table grape, succeeding only under glass in your latitude.

Plant six feet apart, along the length of the building, and as there is but two feet of air in depth, proper attention must be given to ventilation, and shading with screens from the hot sun, or the vines will parch. Have the front so constructed that the sashes can all be taken away during the heat of Summer, which will save no little care. Return the glass when frost is apprehended, and the season will thus be lengthened sufficiently to mature the fruit. Were we to construct a cold graperie on this plan, we would have the roof project far enough to give three or four feet in depth instead of two feet. We repeat, great care will be necessary to ventilate every

warm day, and shade with paper or muslin from the direct rays of the sun.

### Apples Half Sweet and Half Sour.

The note on this subject has called out several communications. We make a few extracts. Mr. Henry F. Gifford, of Barnstable County, Mass., writes:

One of my neighbors has a tree, one limb of which produces apples half sweet and half sour. The way they are produced, *he says*, was by taking a bud from a sweet and sour apple tree, splitting them, putting the two halves together, and budding the tree in the usual manner with them. Perhaps in some such way the tree of "John Dunning" was produced.

S. W. Thomas, Cuyahoga Co., Ohio, writes: "...In Northern Ohio many of us have had these trees in full bearing for several years past, producing not only apples half sweet and half sour, but those nearly all sour with a small portion sweet, and others directly opposite; in short, they are of all grades, from entire sweet to entire sour. I can not give time, place, and name of person, but these were produced thus: At the time of budding a bud was taken from the R. I. Greening, and another from the Golden Sweet, as we call it here. The two buds were cut lengthwise through the center, each precisely alike, so that the opposite parts fitted exactly together when they were inserted as in ordinary budding. This is a nice job, I assure you, but if correctly done, will as surely produce the hybrid apples as a single bud will produce a single variety. This may be doubted by some, but repeated experiments have proved the correctness of the statements.

#### AN EVER-BEARING APPLE TREE.

William Crocker, Erie Co. N. Y., writes: The instance of the hybrid apple, described in the November number, reminds me of a curious tree I myself saw in South Carolina. There was on this tree, at the same time, *blossoms, green apples, and ripe fruit*. The owner of the tree informed me that the tree produced five to seven crops in a single season—each succeeding yield, however, diminishing in size.

### Planting Orchards on a Northern Exposure.

To the Editor of the American Agriculturist:

I should be individually obliged if you will state, for myself and others, whether planting apple-trees on a situation slightly inclined to the north or west, would be, in this latitude ( $43\frac{1}{2}^{\circ}$ ), likely to injure their growth, or Winter kill them, more than in a situation having a like inclination to the south-east.

G. W. SHELDON.

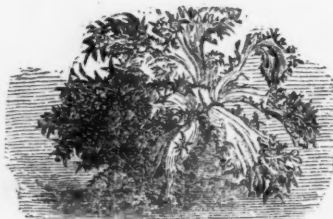
Fondulac Co., Wis.

REMARKS.—If the land has a good natural drainage—that is, a porous subsoil, and a dry locality, a northerly exposure will not be prejudicial to the trees, either in "growth" or "Winter-killing." By reference to our orchard article in the January number (page 17), it will be seen that we prefer a gentle southern exposure, provided we could have our own way in all things. But if the soil is good, and we could do no better, we should embrace the opposite exposure by all means. We do not consider the degrees of latitude as governing the exposure at all, provided other circumstances are favorable; still we would not plant an orchard right in the face of prevailing and violent winds. In a case of this kind we

can only speak generally, not knowing anything of the particular locality.—Ed.

### Walnut and Mulberry for Shade Trees.

Milton Baldwin, of Greensboro, Ind., referring to the article on shade trees in pastures given in the August *Agriculturist*, page 236, commends the practice of beautifying the farm with shade trees scattered here and there. But he would combine the useful with the beautiful, and plant the walnut and mulberry instead of the oak and elm. He thinks the former two are less liable to be blown down when standing alone. The walnut (hickory?) naturally grows tall, but by early pruning it may be made to take a low branching form. Its timber is more valuable than the elm or oak, while it yields an annual crop of nuts for sale, and for the boys and girls as well as older people to crack during the Winter evenings. [Not very good to sleep on.—Ed.] The outside hull of the nut is also valuable for family coloring... The mulberry bears a fruit which is highly prized by the birds, and these trees thus draw around one a multitude of the cheerful feathered songsters. Some varieties of the mulberry furnish a fruit valuable for human consumption.



Endive—(*Chicorium endivia*).

A Western subscriber says he sees in our "Calendar of Operations" frequent directions for sowing endive, but neither he nor his neighbors know the plant, and they, and probably others, desire a description of what it is, and how grown and used... The engraving above shows the appearance of the growing plant. It is often called "*chicoree*." It is a highly prized salad, and is, at this season, what lettuce is in the Spring and early Summer.

To have it in perfection during Winter, the seed should be sown the latter part of July, in drills 12 to 15 inches apart. Transfer the plants to cold frames about the middle of August, watering and shading them until well established. Or: they may be grown in the beds where sown. Keep the plants thinned out, so as not to be crowded, and when freezing weather comes on lift them with a portion of earth adhering, and transfer to cold frames, which are used merely as a partial protection. Cover with the shutters and with straw, or other litter, to keep out rain and hard frosts, but a free admission of air should be provided whenever the weather will allow. They will require less blanching when grown thus at this season, than when cultivated in the open ground at an earlier period.

When the leaves become large tie them up while free from rain or dew, and not frozen, and draw a little earth around the base to support the plants. They will blanch in a week or two sufficiently for use. Some prefer blanching (whitening) them by laying a board over the plants, which flattens them down. A few dry forest leaves spread over the ground around the plants will aid to keep them clean and dry. Treated as above, endive will furnish a nice salad during the entire

Winter. The French people and some others are fond of it boiled or stewed. As endive does not appear to be widely introduced, we may, perhaps, add the seed to our distribution list.

### Freezing out Currant-Bush Insects.

To the Editor of the American Agriculturist:

I have a few suggestions to make in regard to the *currant louse*, which your correspondent D. Goodyear, described very accurately in the June *Agriculturist*. I did not observe, however, that they left my bushes in the form of a fly. On the contrary they remained in great numbers until both leaves and fruit prematurely fell off or withered, and on examining the ground late in the Fall, I found plenty of them just below the dead leaves. To try the effects of frost upon them, I dug the ground over just before the setting in of Winter, leaving the earth in a fine loose state that it might freeze deeply. I also kept the snow away from the bushes during the Winter for the same purpose. When the frost was out in the Spring, I sprinkled the ground liberally with lime, and am now happy to say that not a louse made its appearance on my bushes during the present season. I have had an excellent crop of fruit, and many of the leaves still remain upon the bushes.

J. THORNILEY.

Franklin Co., Mass., Sept. 13, 1858.

REMARKS.—The above was crowded out at the appropriate season, but it may still afford a hint to those having bushes preyed upon by insects, as the ground will be unfrozen at times during this and the following month. Many of these insects are so fixed to the spot where they commit their depredations, that in addition to freezing them out, they can be removed by taking away a portion of the soil containing the grubs and supplying its place with fresh earth. Late Fall is the best time for this purpose. The free use of lime is often useful upon ground infested with insects.

### Interesting Notes on the Winter Cherry, and Husk Tomato.

Thomas Williams, of Nanticoke, Canada West, in a business letter to the *Agriculturist*, adds the following items: "...A word on the fruit you call "Winter Cherry," and various other names—here we call it the "Ground Cherry." I have cultivated for two years what you term *Physalis viscosa*, and am quite interested in it as a new garden plant. My seed came from Illinois, and though on my stiff clay garden soil it has not had a fair chance, it does well in Canada on looser, warmer soils. I received seed from the same source, which proves to be what you pictured under the hypothetical name of "Husk tomato." The fruit did not ripen, owing to the attacks of a little black bug, which here perforates the leaves of the potato, tomato, and other kindred plants. The insects took a special fancy to the flowers of the "Husk tomato," and ate them as fast as they appeared, until quite late in the season, I saved a little seed, however, and shall try them again.

I think we have varieties of the *Physalis* growing wild, which differ from all the kinds you have described. In Canada and in several parts of the United States I have met with a sort which somewhat resembles the *P. viscosa*, in the general appearance of the leaf, flower, and husk; but the leaf is a lighter green, more downy, and white on the under side; the flower is a brighter yellow; the fruit is not so pleasant tasted and much



smaller, and I am almost sure that the root lives in the ground all Winter. I have found them in flower when the *P. viscosa* had scarcely begun to show itself, and then its root appeared strong and woody. I have met with this in Pennsylvania, and in all parts of western Canada, even above the 44th parallel. It loves warm, sunny banks. In Pennsylvania (where I spent part of my boyhood) we had this and another kind, a greater favorite with the boys on account of its more plentiful and more acid fruit. It was a low trailing plant, lying on the ground, the leaf a canker green and more smooth and small than the *P. viscosa*.

But I have seen and eaten yet another kind, which is, I think, better than any or all that you or I have written about. I met with it about twenty years ago, while employed as a sort of assistant engineer in running out a road between the west end of Lake Simcoe and the south end of the Georgian Bay, Lake Huron—the country then an unbroken forest. Part of it was a burnt region, burned about three years before we were there. Here, in the month of July, we found a plant strange to us, what first drew our attention to it was that the deer had browsed it off close to the ground. In coming to the same place in the latter end of July, we found it in full flower. We then classed it with the potato, and thought, indeed, that we had discovered a Canadian variety of the wild potato. We hunted for tubers, finding none, but found a large, woody, fibrous root. In September I visited the spot again, and found abundance of fruit, larger than cherries, a bright yellow, with a very rich, somewhat acid and sweet taste. Each plant bore from one to two quarts, though shaded by the trees and plants around them. The plant grew from one to two feet in height, and quite branching. I have never seen the same kind growing elsewhere. My acquaintance with them continued for two seasons. I then left that part of the country, and have never visited it since. It is now settled. But I have often since proposed taking a journey thither, in order to procure seed, and introduce them into notice. I now purpose doing so next Autumn (if spared.) I am sure they are the best I ever met with.

REMARKS.—We hope Mr. Williams will carry out his intention. We are becoming more and more interested in this plant. We, of course, can have no selfish end to further in recommending it. From among many statements received from persons in various parts of the country, we will select only the following of recent date, from an intelligent gentleman in a high position. He says: "...We tried the Winter Cherry seed you distributed last Spring, and are much pleased with the results. This is one of the most promising things lately 'brought out.' People can get fruit from them, when all other kinds fail, and they get it in a few months from planting, that is the same season. I never ate better pies than those we have had the past summer made of Winter cherries and some lemon added. Without the lemon or some other tart they are rather insipid, but with this addition they are very excellent, having a pleasant taste with a kind of pine-apple flavor."

There are doubtless many varieties of the *Phytolacca* growing wild in different parts of the country, and it is desirable to find the best. We believe this plant will soon help to fill up a gap in the fruit line with a multitude of families, especially at the West, where tree fruits are not yet planted, or have not come into bearing.

We have seed enough of our own raising, to distribute about 15,000 small parcels, of 50 to 75 or more seeds in each, but we shall be glad to learn where we can purchase a further supply, in

case our own stock runs short. If seed is offered for sale, we shall desire to see specimens of the fruit from which it is obtained, and also learn reliable particulars as to the variety, habit of growth, etc.

### Fix the Garden for Winter.

Go through the whole county at this season, and you will find ninety-nine gardens out of every hundred, the most unsightly spots on the farm and about the village dwellings, and so they will be all through the Winter. Here are standing mutilated stalks of plants—too many of them weed stalks—there is a mass of potato vines, literally "lying around loose." Here are cabbage-leaves, corn-stubs, onion-tops, etc.; there are hills and mounds of earth, produced in digging beets, carrots, and other roots. Only a deep snow will cover the garbage, and give a pleasant look to the spot which was so attractive during the recent growing season. In the Spring all this trash will be gathered, the ground leveled and raked, and the gardens will look cheerful again, though not a plant or leaf has yet appeared.

But why not do the "cleaning-up" now? It will take no more time than in Spring, and how much better the garden will appear all through the cheerless winter. Just try the effect of gathering the rubbish and putting it in a heap in an out of the way corner; or laying it evenly over strawberry or asparagus plots; rake off the surface of the beds smooth and level, unless you ridge the ground, as recommended elsewhere; fix up the walks or alleys a little, and leave the whole with the appearance of having been recently prepared and planted. A few hour's work of this kind, done now, will save so much time in the Spring; the ground will dry out earlier, than if partially covered up with leaves and rubbish; and the cultivated look will, even in Winter, constantly afford a kind of pleasure, similar to that experienced when one has finished making garden in the Spring, and is looking for the coming crops.

### Try Ridging your Garden.

There is not the slightest doubt that it pays well for the trouble, to throw almost any garden soil into high narrow ridges, in the Fall or early Winter. The frost will penetrate deeper at the bottom of the intervening furrows, and vastly improve the subsoil for the roots of plants. The soil in the ridges will also freeze and thaw more thoroughly, and thus become finer and mellowed, and of course be rendered more fertile thereby. This is especially the case with clay or heavy soils. Ground thus thrown into ridges and furrows will dry out sooner in the Spring and be ready for much earlier working.

Another decided advantage is, that grubs, worms, and insects generally, which burrow below the frost, or are protected by the soil from sudden thawing and freezing, will be mostly killed, if their retreats are disturbed and they exposed to severer cold. Many of the roots of perennial weeds, will also be destroyed.

If you have not faith enough in this theory, and in the experience of those who have practiced upon it, to induce you to treat your whole garden thus, try at least a small plot and mark the effects next season. Dig the ground deeply, making the ridges as narrow and high as possible. If it ordinarily freezes a foot deep, then by making the furrows to that depth the frost will penetrate nearly as much further down. A good

freezing is equal, as a pulverizer, to any number of mechanical diggings with a spade.

For the good appearance of the garden during Winter, it is well to make the ridges and furrows straight, and uniform in size and height.

### Covering Raspberries for Winter.

Most of the improved newer varieties of Raspberries need protection during Winter, such, for example, as the Fastolf, Antwerp, and Brinckle's Orange. Some or all of these will sometimes live through, but if they do this, they will be less vigorous, and fruit much less than if covered. It is not so much the hard freezing that injures them, as the alternate sudden freezing and thawing they receive in the open air. Two inches of soil thrown over the canes bent down, prevents a sudden change of temperature, and is quite as good as a deeper covering. Probably most persons will have attended to it before reading this, but if not, it should be done at once, or at the first moment when the ground is unfrozen.

Raspberries may be covered with straw, salt hay, boards, and earth. A covering of earth has always been found the best. Many people make unnecessary labor—bending down and covering cane by cane. We rapidly protect ours as follows: Commencing at one end of a row, bend all the canes towards the other end, packing them in closely, so that they form a compact line of plants requiring but little earth to cover them. We prefer the fork spade as less liable to injure them. Run the spade under the hill and gently incline it to the side you wish to lay it down. Without this tipping the canes liable to break off at the surface. Having bent over the first hill and thrown just earth enough over some part of it to hold it there, go on to the second hill, and follow the same course to the end of the row. Next throw on sufficient earth, from between the rows, to cover them from two to three inches deep, or just sufficient to prevent the winter rains from washing them bare, and they are in the very best winter quarters, with ditches between the rows to pass off surplus water. Remove them in the Spring as soon as severe freezing is over.

### Cement for Glass under Water.

In response to the inquiry for a cement for glass under water, as in aquariums, J. B. Sewall, of Lynn, Mass., writes, that after various trials he found the following excellent, for which he is indebted to a chemical friend: Take by weight, twelve parts of resin; four parts gum shellac; two parts common beeswax; one part Spanish brown; and two parts of Plaster of Paris or fine brick dust, say enough to make the cement tolerably thick while melted. After being applied, it can be smoothed with a hot iron. If a leak should happen from any cause it can be mended with the hot iron in a trice—the water being first removed of course. This cement does not crack, and is perfectly insoluble in water.

H. A. Sheldon, Middlebury, Vt., writes that in constructing an aquarium, he was obliged to invent a cement, and he finds the use of the following perfectly successful: Dissolve two ounces of gum shellac in six ounces of alcohol, mix with clean clay dried and powdered. To use, dilute with alcohol and apply with a brush. It effectually prevents any rusting of the iron.

Nature sometimes makes a fool, but a coxcomb is always of his own manufacture.

## IN DOOR WORK.

### About Coffee.

Last month China tea was discussed. We will now offer a few items on coffee, to be followed with further notes on coffee-pots, on cocoa, chocolate, etc. Has any one an adequate conception of the amount of coffee consumed? From the best data at hand we think the total production can not be less than *five to six hundred million pounds a-year*—perhaps more. The curious may estimate how many sheets of wrapping paper, and how long a string it would take to put all this coffee up in pound packages; how many cups of liquid coffee it would make; how large a lake this liquid would fill; how many persons would consume it if all drank two cups at breakfast; how much sugar and how much cream would be required to fix it, etc.

The seeds of several kinds of plants are used for coffee. The seeds of the *Arabian coffee-tree* are the main supply, however. This grows wild in Southern Abyssinia, Africa, from whence it was probably introduced into other countries. It is now extensively cultivated in Ceylon, and other East Indian countries; in the West India Islands; in Brazil, South America, and in many other tropical regions. Its commercial value depends considerably upon the climate and soil, but its flavor, and the quality of the beverage produced, are more dependant upon age and the manner of preparing the liquid.



Fig. 1—Arabian Coffee Tree (*Coffea Arabiaca*).  
Height about 18 feet.

Fig. 1 exhibits the general form and appearance of the tree. The specimen shown is about 18 feet high. The height of the tree varies in different countries, from 8 or 9 to 18 or 20 feet. It is covered with smooth, shining, dark leaves, 2½ to 3 inches long.

Fig. 2 shows the form of the leaf, flowers, and seeds or coffee berries. The size of the berries varies with the quality and location of the soil.

The plants are raised from seed sown in beds and nurseries, and transferred to fields when six months or more old. They do not produce full crops of berries until the third or fourth year, but continue bearing 12 to 15 years or more. They do best on a dry, warm soil. The higher and dryer soils produce smaller but better flavored berries.

As before stated, the flavor improves greatly by keeping. Some of the smaller kinds will attain nearly their full flavor in two or three years, while larger poorer kinds continue to improve for 12 or fifteen years, or more. The poorest kinds, if kept long enough, will become better than the best kinds when recently gathered.

Few persons are aware how similar the effects of coffee upon the system are to those of China

tea. Indeed, the three effective ingredients or constituents of coffee strongly resemble those of tea. The aroma and flavor of tea are brought out in the drying process, and a similar result is obtained in roasting coffee. In long keeping, as well as in roasting, a *volatile oil* is developed in the coffee berry. This oil is similar to that described in tea, but is in much less quantity. In roasted coffee it scarcely amounts to an ounce in 3,000 pounds, yet upon this small portion of oil and its variable quantity depends the value and variations in price of the different kinds of coffee. Payen says, that if this volatile oil could be extracted and used in flavoring the poorer kinds, it would



Fig. 2—Leaf, flower, and berries of the Coffee Tree—  
Leaf 2½ to 3 inches long.

be worth in the market as much as \$8,000 a pound! Direct experiments upon the human system have been made with this oil. It was found that a quantity no greater than the *four-hundred-thousandth part of a pound*, or the *twenty-five-thousandth part of an ounce* (less than *one-sixtieth of a grain*!) taken daily, produced a gentle perspiration, dispelled hunger, moved the bowels and exhilarated the brain; while double this minute quantity (the amount obtained from ¼ lb. of coffee) induced violent perspiration, or sweating, with sleeplessness and incipient congestion.

Unroasted coffee contains about one part in twenty of an astringent acid, similar in effect to oak-bark tea. There is less in roasted coffee, but still enough to produce marked tonic or strengthening effects. This astringent principle is much less than in tea; hence it operates less to constipate the bowels, while the oil above described has a cathartic effect. We have known persons so sensitive to this, that a single cup of coffee would almost invariably produce a movement of the bowels—sooner than a tablespoonful of castor-oil, or an equivalent of other cathartic medicines. The powerful effects of these minute quantities of ingredients in coffee and tea would indicate a greater degree of caution in the consumption of large potations of either beverage, for let it be remembered that the effect is the same, whether the oil, etc., be separately swallowed, or taken in the liquid as usually prepared. The only reason why more marked effects are not generally observed is, that the quantity consumed at a time by one person is seldom as much as an ounce, and further, the system gradually becomes somewhat accustomed to the effect. The liquid from three or four ounces of coffee, if taken at one time by a person unaccustomed to this beverage, would produce violent, if not fatal effects. Can we wonder then, that those drinking freely of strong tea or coffee are troubled with weak, unsteady nerves, neuralgia, headaches, and a hundred other ailments? With these, as with all other stimulants, an exhilaration is first produced; then follows a depression of spirits, by which time another dose of stimulant is felt to be needed, and is usually taken. With this common

sense view of the matter, it is the height of absurdity to accustom growing children and young persons to the use of coffee or tea. It is worse than absurd; it is cruel. It is equivalent to compelling them or allowing them to carry a chain that will wear into their flesh a sore difficult to be healed, which must ever after be daily dressed with a mollient ointment.

We will say nothing of the practicability or the impracticability of breaking from the habit, by those already long in its chains, but having set forth the dark side of the picture, will refer to the few bright spots there are, which may be slightly consolatory to those who cannot do without their "cups."

Coffee contains a variable quantity—one pound in a hundred, more or less—of *Caffeine*, a substance almost, if not exactly like the *Theine* in China tea. An ounce of coffee contains, say 4 to 5 grains of caffeine. Eight or ten grains taken daily produce a more frequent pulse, a stronger beating of the heart, trembling, wandering thoughts, and incipient intoxication. Small quantities of two or three grains (the amount in ¼ oz of coffee) do not produce specially disagreeable effects, but lessen the evacuations, and probably diminish the waste of the tissues; and on this account may be beneficial to weak and aged persons, if the effects be not overcome by previous habit. This is small comfort, but may be taken for what it is worth.

*Nourishment in Coffee.*—Like tea, coffee contains considerable quantities of nutritious *gluten*, gum, and sugar. Of gluten, coffee has about one part in 7½; tea, 1 part in 4. Of gum and sugar coffee has about 1 part in 7; tea, 1 part in 5. But since a much larger quantity of coffee is used for a cup of infusion, the actual nourishment in a cup of coffee is greater than in a cup of tea. It is to be remarked, however, that these nourishing elements are not largely dissolved out in steeping either tea or coffee. To get the full, or even any considerable portion of the nourishment, the "grounds" must be eaten after they are steeped. This is practiced among some Eastern nations, and the custom is to be commended, especially to those who, from necessity or choice, would make every article of food go as far as possible in nourishing the body. But as shown in the case of tea, the nourishment from coffee, if taken for that purpose alone, is rather *expensive*. *Gluten* (the muscle, or lean flesh forming element), if obtained from coffee, by the consumption of the entire berry, costs about \$1 per lb., estimating the cost of the coffee at only 13 cents per lb. As shown in discussing tea, gluten from beans, at \$2 per bushel, costs 12 cents per lb., and from fine flour at \$7 per barrel, 30 to 35 cents per lb., reckoning nothing for the large amount of nourishing starch and oil in the latter two substances.

We must defer to another chapter a talk on making coffee—including coffee-boilers and coffee pots—to be followed by a description and discussion of cocoa and chocolate.

**GARDENING FOR LADIES.**—Make up your beds early in the morning; *sew* buttons on your husband's shirts; do not *rake up* any grievances; protect the young and tender *branches* of your family; *plant* a smile of good temper in your face, and carefully *root out* all angry feelings, and expect a good crop of happiness.

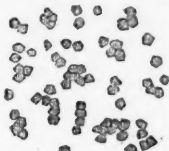
An honest employment is the best inheritance that can fall to any one.

A libertine's life is not a life of liberty





GRAINS OF POTATO STARCH.



GRAINS OF RICE STARCH.

For the American Agriculturist.

### Something More About Starch.

The article upon starch in the October number opens a subject upon which much that is instructive may be said. The readers of the *Agriculturist* have already been told where starch comes from, how it appears under the microscope, what it consists of chemically, and how it is obtained separate from other vegetable products and prepared for use. The next inquiry may be

**How Starch is formed.**—Plants alone produce it; and there are perhaps no plants which do not produce more or less starch, or something answering to it, and of the same nature. Sea-weeds, and such plants as the Iceland Moss produce instead a kind of jelly; but this is about the same as starch is, after it has been dissolved in hot water. One botanist has defined a plant to be, "an organized being which produces starch." Starch is made out of the nourishing juice or prepared sap of plants; it is merely this in a solid form. The magnified grains of potato starch, figured in the October *Agriculturist*, which we have introduced again above, show how they were made. Notice the delicate lines that encircle one another, and successively surround a point which is generally near to one end of the grain. This is the *nucleus*, the beginning of the grain when it was a minute speck; and the encircling lines mark the layers, like the coats of an onion, of which the grain is built up. First, a little solid speck is formed, and on this, layer after layer of nourishing matter is deposited from the sap; and so the starch-grain grows up to its full size. When starch is put into hot water, the grains do not exactly dissolve, but the layers soften, swell up immensely, and form a kind of jelly. This jelly is of the same nature as the mucilage or nourishing part of the sap, which the plant made the starch of.

Where does this mucilage, this prepared material of the starch come from? The plant makes it out of air and water—i. e., out of carbonic acid and water, which it takes in by its roots and its leaves. As already stated, starch is composed of 12 parts of *carbon* (charcoal), 10 of *hydrogen*, and 10 of *oxygen*; the last two form water; so we may say that starch consists of *carbon* and *water*. Now plants absorb the water abundantly from the ground by their roots, and also from the air by their leaves. The other material of starch, i. e. the *carbon* (or charcoal), comes from the carbonic acid of the air. *Carbonic acid* gas, which makes up a small part of the atmosphere (any large amount would be injurious), consists of *carbon* (coal) united to *oxygen*. To make starch, or the prepared materials of starch, the plant has only to get rid of the *oxygen* of some *carbonic acid*, and to combine its *carbon*, in some peculiar way, with the water. To do this, the plant must have the assistance of the sun; and one great object of the vast amount of sunshine which is poured upon field and forest is, to enable plants to do this work. This they do in their foliage, or other green parts, and in these only when they are acted upon by the sun. Then the leaves are constantly decomposing the *carbonic acid* gas they are drinking in from the air, giving back its *oxygen* gas pure to

the air, and combining its *carbon* with the *hydrogen* and *oxygen* of the water, in a way that is never done anywhere else. That is, they are digesting or *assimilating* air and water into *vegetable matter*, of which starch is one of the commonest forms. Air and water are the *raw materials*; the light of the sun supplies the *motive power*; *vegetable matter* is the *manufactured substance*; and starch is one of the completed products—one of the *articles into which the manufacture is worked up*. What it is for, that is, what the plant does with starch, may be considered another time.

FARINA.



Winter Flowers for the House.

Hyacinths, tulips, jonquils, crocuses and other bulbs are frequently grown, or rather *flowered*, in glasses containing water only. They do not form new bulbs, so that after blooming they must either be planted out for offsets, or better thrown aside for healthy bulbs grown in the ordinary way.

Glasses like the above, and of other forms, some transparent and others blue or green, are obtained of glass dealers, or seedsmen, at 12½ to 25 cents each. They are known as "Hyacinth Glasses," and whatever shape they are at the bottom, the top must have the form of a saucer or bowl to hold the bulb and allow the roots to extend into the water.

Having filled the glasses with pure rain water, place the bulbs in them so that the lower surface shall just touch the water. Dry bulbs which have made no growth may be taken, or those which have been previously potted and have made several inches of root. After putting them in glasses it is better to place them in a moderately cool and dark, but dry room, for a week or ten days, when they may be brought to the *parlor*, or placed in a green-house, where they will grow rapidly, and in a few weeks commence blooming. The water should be changed about once a week, or as often as it becomes turbid. Wires are sometimes fastened around the neck of the glass, and run up, to which the flower-stalk may be fastened for support. A very cheap supply of beautiful flowers may thus be secured in the house during the entire winter.

### Ladies and Gentlemen going up and down stairs, Walking, and other items of Deportment.

To the Editor of the American Agriculturist:

Many of us "Young Girls" have been greatly instructed by your recent articles on Setting out the Table and other hints on deportment, for not a few of us have had as little opportunity for learning elsewhere, as had the "young house-keeper," who first called for aid in the July number. May we not from time to time propose further questions to ANNA HOPE, or other correspondents—such for example as I have written above? If you will tell us how gentlemen do also, it will not only help us to instruct our brothers, but also let us know what to expect of men, and thus render us less embarrassed. I would ask more, but these are perhaps more than my share, and I will leave others to send in more queries. JANE.

W—, Ind., Nov. 6th, 1858.

[We shall be very happy to receive queries in regard to deportment, and will endeavor to put them into the hands of those fully competent to answer them. The above we submitted to Anna Hope, and her reply follows.—Ed.]

"The polite usage" in regard to ascending stairs is a somewhat mooted question. Some persons think it always the better way for the gentleman to precede the lady both in ascending and descending. Others say nothing is more absurd than to do this. Precedence should always be given to those to whom we owe respect, or are accustomed to show it, consequently when the gentleman does not ascend with the lady, he should follow her, not far behind, but as closely as he conveniently can. It is often proper to offer the arm to a lady in going up stairs. If there are several ladies, assist the eldest, or the most feeble, or the one that for any reason has a special claim upon attention. The gentleman will give the lady the side of the stairs next the balusters, so that if she needs to use the railing she may be able to do so.

In descending stairs the same rules of precedence may be observed—the gentleman following the lady at a convenient distance.

If a lady and gentleman who are strangers meet at the foot of a flight of stairs, the lady may, if she chooses, bow to the gentleman to ascend before her. He of course bows courteously to her as he passes up.

If a lady and gentleman meet on a public stairs, or at a passage-way, he moves sufficiently to one side to permit her to pass readily, touching his hat as he does so. Should a lady be entering the parlor or dining-hall of a hotel, either alone or in

company with a gentleman, another gentleman, who should chance to meet her, should give her the precedence with a slight bow. A lady should always acknowledge these courtesies by an answering bow. If well bred, she will receive no attention at any time, without a graceful bow or nod, although it may be a slight return.

Gentlemen, when walking with ladies on the street, should take the side which will best protect them from inconvenience. In the country it is usual to give the lady the inside of the walk; in a city or village the gentleman should walk between her and the crowd, on which ever side it may be. If there be no crowd, it matters little which side be taken.

If a gentleman meets a lady with whom he wishes to have a minute's conversation, it is better to turn and walk with her rather than to detain her. This is especially important in cities where it is often a great inconvenience to have the side walk obstructed by those who are shaking hands and exchanging most kind and cordial greetings. Where ladies stop to speak to each other they should retire from the current, and not permit themselves to incommode others.

It is expected of a lady to recognize a gentleman who has been introduced to her. If she does not, he is not at liberty to recognize her.

Gentlemen usually lift or touch the hat when bowing to a lady. Not to do this implies that the person saluted is an *inferior*. Gentlemen should raise the hat when meeting a gentleman acquaintance if he be accompanied by a lady, a mere nod would be considered disrespectful to her. If, when walking with a friend, you meet an acquaintance, it is not proper in ordinary circumstances to introduce the friend.

It is always proper for ladies to accept needed civilities from strangers, and such civilities should be rewarded with an "I thank you, sir," or a pleasant smile, or a courteous bow.

Do not when talking with your friends place your hand upon them to give emphasis to your remarks. This "nudging" is vulgar. There can be no surer indication of ill-breeding.

Do not giggle; that is insufferably silly. Laugh heartily, but not carelessly. Smile when you feel like it, but don't let your face wear an unmeaning smirk.

Cultivate a quiet, natural, self-possessed manner. Self-possession is one of the distinctive attributes of a lady, and prepares her for meeting any of the exigencies of life gracefully and properly.

The rule of politeness are not mere arbitrary regulations. They are founded on common sense. A kind, loving, unselfish heart has in it the elements of the most perfect courtesy, and no mere ceremonious civility can ever compensate for the want of it.

ANNA HOPE.

### Colds, Coughs, Consumptions, etc.

Or diseases of the lungs, are as prevalent as ever—we think more so. And no wonder! Every improvement in the construction of dwellings or in modes of heating them, which has a tendency to confine the warm heated air within, is so far an aid to the "lung doctors." Reader, did you ever stop to think what an extended apparatus you have in your lungs—made up as they are of millions of little air cells, covered with a thin delicate membrane constantly in contact with the air or other substances you breathe? According to the estimate of Dr. Addison, the united air cells of the two lungs number one billion seven-hundred and forty-four millions (1,744,000,000!). The lining membrane of these covers a space of fifteen-

hundred square feet. Is it anything strange then that noxious or re-breathed air, miasmatic odors, etc., coming in contact with this vast surface, and with the blood through it, should not only irritate the lungs themselves, but also render the blood impure? This is a fruitful subject—we can now touch upon only one item—that of *re-breathed* air.

During a single minute a person draws in and sends forth from  $1\frac{1}{2}$  to 3 gallons of air, which comes forth impregnated with carbonic acid and other impurities. A little calculation will show that in a small close room, a single individual would soon breathe all the air, and much of it many times over, as the pure and impure are mingled at every breath. The case is much stronger when several persons are in the same room, and still more so when a crowd of children are in a school-room, or a congregation in a house of worship or lecture room. We can not better "enforce" the subject than by giving the following appeal to the "Sexton of a meeting-house," which we find in our drawer. It is credited to the Detroit Tribune—we know not by whom written. The spelling is not exactly according to the dictionary, but it needs no translation. Read and heed.

#### A APPEAL FOR ARE TO THE SEXTANT OF THE OLD BRICK MEETINGHOUSE.

BY A GASPER.

O sextant of the meetinghouse, which sweeps  
And dusts, or is supposed too! and makes fiers,  
And lites the gass, and sumtimes leaves a screw loose  
in wich case it smells orful—worse than lam-pile;  
And wrings the Bel and toles it when men dyes  
to the grief of survivin pardners, and sweeps pathes  
And for the servases gits \$100 per annum,  
Wich them that thinks deer, let em try it:  
Getin up befor star-lite in all wethers and  
Kindlin fiers when the wether is as cold  
As zero, and like as not grean wood for kindlers  
i wouldnt be hired to do it for no some—  
But o sextant! there are i kermoddity  
Wich's more than gold, wich doant cost nothin,  
Worth more than anything exsep the Sole of Mann  
i mean power Are, sextant, i mene power Are!  
O it is plenty out o dores, so plenty it doant no  
What on airt to dew with itself, but fies about  
Scattering leavs and bloin of men's hatts;  
in short, its jest "fre as are" out dores.  
But o sextant, in our church its scare as piety,  
scarce as bank bills wen agints beg for mischuns,  
Wich some say is purty often (tsint nothin to me,  
Wat i give aint nothin to nobody); but o sextant  
u shet 500 men, wimmen and children,  
Speshally the latter, up in a tite place,  
Some has bad breths, none aint 2 swete,  
Some is fevery, some is scrofulus, some has bad teath,  
And some haint none, and some aint over cleen;  
But every 1 on em breathe in & out and out and in,  
Say 50 times a minit, or 1 million and a half breths an our,  
Now how long will a church-ful of are last at that rate.  
i ask you, say 15 minits, and then wats to be did?  
Why then they must breathe it all over agin,  
And then agin, and so on, till each has took it down  
At least 10 times, and let it up agin, and wats more,  
The same indivisible dont have the priveledge  
of breathe his own are, and no ones else;  
Each one mus take whatever comes to him.  
O sextant, doant you no our lungs is bellusses,  
To blo the fier of life, and keep it from  
going out: and how can bellusses blo without wind  
And aint wind are? i put it to your conschens.  
Are is the same to us as milk to babies,  
Or water is to fish, or pendlums to clox,  
Or roots and airbs unto an injun Doctor,  
Or little pills unto an onepath,  
Or boys to gurls. Are is for us to breathe.  
Wat signifes who preches if i cant breathe?  
Wats Pol? Wats Pollus? to sinners who are ded?  
Ded for want of breth? why sextant, when we dye  
its only coz we cant breathe no more—thats all.  
And now, o sextant, let me beg of you  
2 let a little are into our church.  
(Power are is sertin proper for the pews)  
And do it weak days and Sundays tew.  
it aint much trouble—only make a hole  
And the are will cum in of itself  
(it luv's to cum in where it can git warm);  
And o how it will rouze the people up,  
And sperrit up the preacher, and stop garps,  
And yawns and figgits as effectool  
As wind on the dry Boans the Profit tells of.

### Chapped Hands.

These are very common "about these days." Cold weather chills the surface of the skin and prevents a free circulation of the blood, and consequent warmth, and thus induces or aggravates the difficulty. One of the primary causes of chapping or cracking of the skin is the action of soap. The alkali in this eats away the cuticle or outer skin, and thus destroys the natural covering. In cold weather especially, the hands should always be thoroughly rinsed in clean water after washing them with soap. It will be found highly beneficial to wash the skin in a weak solution of vinegar and water, after using soap, and then rinse in clean water. The acetic acid of the vinegar neutralizes the alkali of the soap, and prevents the further action upon the skin, which will take place if the slightest amount of soapy water be left on the hands when they are dried with a towel. On washing days it will be of special advantage to have a vessel of water with a little vinegar added, to dip the hands into whenever they are taken from the washing water. Whenever we find it necessary to wash with soap, we rinse the hands in dilute vinegar, or a very weak solution of any acid, such as a few drops of oil of vitriol (sulphuric acid), muriatic (hydro-chloric) acid, or nitric acid (aqua-fortis), in a quart of water. Any of these acids will neutralize the alkali of the soap. Since adopting this practice we have never been troubled in the least with chapped, or even rough hands, though we do not put on gloves or mittens half a dozen times a-year.

We would add further, that in washing the hands it is usually better to use a stiff brush instead of soap, unless they chance to be covered with oil or tar. A brush is more convenient, more effectual, neater, cheaper, and better every way than soap.

### Saleratus—Cooking Spinach.

To the Editor of the American Agriculturist:

I am very glad to see in the *Agriculturist* for October an article on bread. I have read such terrible accounts of the injurious effects of the bread made with soda and cream of tartar, that you have relieved my mind greatly. As a general thing I should ever prefer bread made from hop yeast. My husband is, however, very fond of the nice, light, fresh biscuits made from cream of tartar and soda, as a change or variety for breakfast, particularly in Winter.

Now, whenever I have had the weakness to indulge his appetite in this respect, my conscience has troubled me very unpleasantly, and the horrors of a ruined digestion, caused by *my hands*, has been a kind of incubus in my quiet hours. I shall from henceforth cast my fears to the winds. ....Some two or three months since I noticed in your paper a question from a lady about the

#### COOKING OF SPINACH.

But I have not seen it answered. My way, and what I thought the general way of cooking it is as follows: Take an enameled saucepan, put a small piece of butter in the bottom, then lay in the spinach (after being well washed and the water shaken from the leaves), sprinkling from time to time a little salt. Sufficient water will adhere to the leaves to cook it. Let it be packed in closely, and the saucepan covered. When tender, take it up and place it on a dish; put a little pepper and some small bits of butter over it. Lay some nicely poached eggs around on the dish, or not, as you require; if eggs are used, it makes a dish of itself; if it is to be eaten with



boiled lamb or chicken they are not required. By this mode of cooking you have a high-flavored, delicious, most wholesome dish, fit for an epicure. By boiling it in water, you have only very nice, tender "greens." It is not suitable with ham, or other high-flavored or exciting meats.

We had in the Spring a small bed about four feet by eight. We cut it at least a dozen times, giving as much as we required till peas and beans came on. My husband cuts off the whole of the plant excepting a few under leaves as soon as it begins to show the first signs of "heading." The advantage is, it prevents the plant from going to seed, and induces a great number of sprouts—four, five and six—large succulent sprouts put forth almost immediately after cutting the first dish, and will keep doing so for ten or twelve times. Observe: Cut the spinach while the dew is on it, and plunge it in a vessel of pure water till required for use. I am, sir,

Your obedient servant,

EMMA NEWBURY.

Walden's Ridge, Tenn., Oct. 25, 1858.

### The Soda-in-Bread Question.

To the Editor of the American Agriculturist:

Reading what you write about bread reminds me to say, that you chemists will be the death of us all some day. You can probably see no good reason why bread baked from dough, that has been inflated by the introduction of carbonic acid gas, should be any worse for digestion than where the inflation is by gas evolved from the dough itself in the natural process of fermentation, so long as the chemical residuum of the drugs used to fabricate the gas is nothing more than a mild bit of medicine in small measure. Now, the bad effects of eating soda-raised bread may have no connection at all with the residuum, be it called tartrate of soda or Rochelle salts, and yet chemistry be none the wiser on the point than your unscientific humble servant. Science can tell us very little about the aromatic parts of our food, and yet the digestibility of food so closely depends upon its aromatic quality, that if anything tastes badly we may be sure it will digest badly, let chemistry say what it may.

In the fermentation of bread the peculiar flavor of the wheat is evolved in union with the carbonic acid gas. In the decomposition of soda though the same gas is evolved, the flavor is absent. Ferment your dough naturally and honestly, knead industriously, and bake thoroughly, and it will give forth an aroma which, as it tickles palate and nostril, will rouse into healthy action every digestive power from head to heel. Practice, on the other hand, the modern shifts and fetches to evade labor and care, and compound with mildly purgative drugs—a batch which may well be called the bread of idleness—and you have a good looking, puffy, tasteless, good-for-nothing, indigestible lump, made without sweat of the brow or elbow grease. It is no more like real bread than sham champagne concocted of Sauterne wine and artificially-introduced carbonic acid gas, resembles the best of Cliquot, whose foam breathes forth odors that were born in the flower and dwelt in the bloom of the grape.

Our French tenant's little wife has a house and children, and cooks for eight farm-hands, yet finds time to knead her dough an hour and a-half. She disdains to use even yeast, relying solely on leaven and her two little doubled fists. Ah, you should taste her light, white, and truly wheathy loaves.

We shall never be a healthy people till we learn to eat what "tastes good," and our women learn

to cook what shall please the palate as well as the eye. I would rather trust to the olfactory nerves to select what is wholesome than all the chemists and physiologists in the world.

WILLIAM J. FLAGG.

Cincinnati, Oct. 5th, 1858.

REMARKS.—This subject is of no little importance, and it is desirable that correct views should be arrived at, for if the use of soda in cooking be anything like as dangerous as many writers would have us believe it is, several millions of families now using it more or less should know and be convinced of the fact. We are willing to hear both sides of the question, and cheerfully make room for the above communication, as we will for others—if not too long. We do not, however, see what point is established by Mr. Flagg. The "chemists" have no selfish end to secure by advocating the theory that a little carbonate of soda is no more poisonous than a little salt in bread. They only set forth facts developed and established by science and observation.

The above theory, that smell and taste are to be the guides in selecting food, is not tenable, we think. Nine-tenths of the present human tastes are acquired ones. We venture that the person who has no previous habits, or is entirely unacquainted with the taste of wines, will little appreciate the difference between the Sauterne and Cliquot. Who naturally loves tomatoes, sauerkraut, musk, and a thousand other things greatly relished by those accustomed to them. Sugar of lead, a virulent poison, would be relished and freely eaten by a child who had never seen it.

We would by no means, however, discourage the use of bread made as the "French tenant's little wife" makes it. For general common use it is to be recommended, but for occasional convenience we are not afraid of a few soda biscuits. They taste good. But more hereafter.—Ed.

### Lima Beans—A New Use for Them.

Every New Englander knows what "baked beans" are, for they are one of the institutions under which he was born and bred. Not the common "pork and beans" of the taverns and eating-houses, where a measure of the little buckshot, white field-beans of our shipping markets, is thrown into a pot of boiling water, a "chunk" of pork ditto, and after simmering and blubbering awhile, as the care, or carelessness of a lazy cook may determine, taken off, thrust into an oven, and baked, or burned to a dead crisp on the top, while all below is just as the "boil" left them; but the fine, large, kidney, bush-bean, bright and clean, properly prepared, as our good mothers always knew how to do them, and our own good wives still do, with a piece of nice, salted, household pork, turned out beautifully from the oven, with fresh rye or wheat, and Indian bread—and what a glorious Saturday afternoon dinner do they make! But we must cut off their eulogy and attend to the Limas.

This last season we had a superabundance of them in our garden. They were planted late, for the proper season was too wet to plant early, as a Lima bean always should be, and they did not get into eating so soon by three weeks, as usual. They bore abundantly, and the frost holding off, the pods were full, although but a part of them ripened. When the Autumn came we picked them all, took them in and shelled them, and laid them on broad shallow dishes to dry. We then—that is, our "women folks"—commenced baking them at our weekly baking, in the place of the kidneys,

with the accompanying piece of pickled pork, and in the same manner, only that they required less preparation by way of "soaking," than the others. And they were capital—richer, every way, than the field bean, as much so as in "green" cooking. We have become a convert. We intend hereafter to plant and pole the Lima for our "baking" beans, and although they may cost a trifle more in the raising, they are enough better—as a luxury—to pay for it. We don't advise everybody to do so, understand. But only such people as really appreciate good baked beans, and are willing to stand by their country in times of peril—partly because it produces them, and their counterpart, pumpkin-pies—and who have the facilities for cultivating them up to the very point of perfection.

### Contributed Recipes.

A friend hands us the following three recipes, now first written out, which are in use by his family, and which are pronounced by him "first rate."

FRUIT PUDDING.— $\frac{1}{2}$  lb. each of flour, grated potatoes, and grated carrots, and  $\frac{1}{4}$  lb. of suet. Salt and spice to taste. Boil 3 hours. To be eaten with wine-sauce.

BOILED BREAD PUDDING.—(Good every day in the week, says our contributor.)—Half a loaf of stale bread soaked in a quart of milk; 4 eggs; 4 tablespoonfuls of flour. Boil  $\frac{3}{4}$  of an hour; serve with wine-sauce. A little green or dried fruit mixed in is a good addition.

"WINE-SAUCE" WITHOUT WINE.—Butter and sugar thickened with corn starch, and flavored with the rind and part of the juice of a lemon.

The following four are from Ellen U. Bacon, Bar Mills, Me:

POP-OVERS.—One cup of flour; 1 egg; butter the size of a nutmeg. Bake in small tin rounds. The same rule is good for nice drop-cakes, baked in cups; or for boiled batter-pudding.

GRANDMA'S BATTER PUDDING.—One quart of milk; 9 eggs, (if you have got 'em); 9 tablespoonfuls of flour, and a little salt. Steam  $1\frac{1}{2}$  hours—if steamed just enough, the pudding will retain its form, and it can not be excelled for delicacy.

GRANDMA'S MARLBOROUGH PIE.—12 spoonfuls each of sifted (stewed) apple, beaten egg, and melted butter—all thoroughly mixed, and flavored with lemon and sweetened to the taste. Bake without upper-crust. Less butter than the above will do.

APPLE CUSTARD.—Take fine apple-sauce, flavor with lemon or rose, and half fill the pie-plates with it. Pour over a nice custard flavored with nutmeg or vanilla, and bake.

A TURKEY BOILED AND THEN BAKED, (from Mrs. A. S. Plummer, Portage Co., O.)—Prepare the turkey just as if for baking; then put in a kettle, covering it with water, and closing in with a lid. Boil until quite tender. Then take it out and brown it in an oven for a few minutes. When put upon the table it will be found very tender and juicy instead of dry and tough.

DEFERRED RECIPES.—A variety of good recipes received from time to time the present year will appear during the Winter.

VINEGAR PLANT.—We have one communication, and several queries respecting this plant. We have one under experiment, which will be reported upon, after sufficient time to test it and study its "nature."



Uncle Frank's Chat with the Boys and Girls

Well, my little nephews and nieces, we have been obliged to take leave of Summer and Autumn both, hav'n't we? We shall see no more of them and the flowers they warm into life and beauty, for a long, long time. Does this loss sadden you a little? I fancy not. Men and women, with many burdens on their shoulders, many griefs in their breasts, many fanciful thoughts within recall of their memory, often have their ordinary cheerfulness, chilled, as the frosts come and chill and wither the grass and the flowers. But in the heart that is young and green, there is very little that is not bright and joyous, and hopeful. And I rejoice and bless our Heavenly Father that it is so. I love to see a troop of boys and girls as merry as the little kitten that plays on the floor, or the cunning squirrels that frisks on the tree. I can say, as one of our charming American poets has said before me.

"I love to look on a scene like this,  
Of wild and careful play,  
And persuade myself that I am not old,  
And my locks are not yet gray;  
For it stirs the blood in an old man's heart,  
And it makes his pulses fly,  
To catch the thrill of a pleasant voice,  
And the sight of a pleasant eye."

Nor is this all. It would be selfish, if it were; I love to gaze upon a merry, rollicking group of urchins, for their own sake, simply because they are happy and because I know that the springs of their enjoyment are away down in their hearts, so deep that the frosts can't reach them.

I have often noticed—and I think you must yourselves have noticed too—that though Winter looks frightful



enough at a distance, with his long, white locks streaming in the wind, yet when we come closer to him, and look him full in the face, and get a little acquainted with him, he appears to be a rather good-natured and jolly old fellow, after all. He used to be a great friend of mine, when I was a boy, I am sure. What lots of fun he did provide for me. The skating, the fort-building, the snow-falling, the sliding down hill, the sleigh-riding—what scenes of sport they have afforded me. I wish some of my southern nephews, who have scarcely any acquaintance with snow and ice at all, could make a visit to this comparatively cold latitude of ours in the Winter, and take a turn with our boys in their sports. I should like to see them on a little sled, dashing down hill at the rate of fifteen or twenty knots an hour.

"But is'n't this rather dangerous sport?" One would think so, certainly, if he were to witness, for the first time, an exhibition of it on a grand scale. I have myself often looked upon a party of boys sliding down a steep plane, where I have wondered that at least half of them didn't break their necks. Two Winters since, at my country home on the Hudson, it was no uncommon thing for me to see between twenty and thirty sleds rushing down hill in a single procession, one after another. They went at a furious speed, constantly increasing, too, of course, as they proceeded downward. Wise men shook their hoary heads, I am not sure but Uncle Frank shook his. It was the impression severally among the more thoughtful and cooler-blooded portion of the community that the race of these reckless scape-graces would come to a very tragic end. But it didn't turn out as the wise ones predicted. Nobody was killed, nobody was seriously injured, so far as I could find out, during the entire sledding season, which lasted some six weeks or more, with a few slight interruptions.

Well, I am not sure but it is a good thing for us old people, who are apt, in the course of time, to get a good opinion of our shrewdness and discretion, to have it proved to us straight out, that we are sometimes woefully mistaken. It tends to make us more mellow, I think, to have a whole set of nine pins, in the shape of false crochets and notions, and whims, all hushed down by a single ball of facts. It may be a humiliating admission, but it has become a part of my creed that there is a great deal of wisdom in this wide-world of ours, which does not dwell under a thatch of white hairs.

But we are getting off the track. Let us return to our sliding. Though there seems not to be much danger connected with this sport, yet it is not always smooth sailing. Sometimes the sled gets away from the boy, and sometimes—which is about the same thing practically—the boy gets away from his sled, while under full headway. Then a scene ensues which usually has less of tragedy in it than of comedy. I remember an incident of this kind which happened long years ago, when I was myself a boy. The victim was George Rose, a great lover of fun, and especially of that particular form of it which we are now considering. There were some ten or a dozen of us engaged one day in the sport. It was capital sliding, and our course extended full a quarter of a mile—all the way from the little brown old Willow-Lane school house to the great brook where I used to do up my fishing. George determined that he would extend his race over the bridge. We all advised against the measure. But it was of no use. George was as headstrong as a mule, when once he had made up his mind to do a thing of this kind. He started, and down he went. You must know the boy set himself up as a hero. Sure enough he went over the bridge at full speed. But this was not the end of his adventure. His sled happened to vary a little from the beaten path, and went plump into a soft snow drift, at least ten feet high. Poor George! Nothing was seen of him or his sled. We all ran to the spot where he had disappeared, and commenced digging away the snow with our hands. It was a slow process. We soon perceived that shovels would be necessary, and two or three were procured—for it struck us that we had'n't many minutes on hand which we could afford to idle away—in the briefest possible space of time. Then the work of excavation went on in earnest. It seemed to me as if we shoveled away tons of snow. But I suppose, that, under the circumstances my judgment was very liable to err. We shoveled on, occasionally stopping to listen. We shoveled—we heard no voice. Poor George! We wondered how much further we should have to dig for him, and whether he was really suffocated. We guessed, we rather hoped he could breathe comfortably away in the bowels of that snow heap, we knew not how far; and we settled down upon that—we reckoned that we should bring him out eventually, at least half alive.

Well, we reached the spot where he was imbedded, at last, and we found him far more frightened than hurt. What a figure he made, when we let the light of day above him. If he had been rolling in flour, he couldn't have been whiter. We all set up a most immoderately noisy concert of laughter, in which, after he had fairly come to his senses, George Rose joined as heartily as any of the rest of the company.

I have sometimes thought that many people in this world spent all their lives in drawing each a sled up hill, and sliding down. You don't quite understand me, and I'll explain. It is a very common notion—so common, that I should not be surprised if you yourself held it, dear boys—it is a very common notion, that we are but moderately happy now, but that there is a point away off in the future, perhaps, at which, when we reach it, we shall find heaps of enjoyment.

The young man, who is learning a trade, looks forward to the time when his apprenticeship shall come to an end, and when he shall himself be a "boss," as a master mechanic is technically termed. "That will be a glorious time," he says, and his eye kindles with hopes, and

he sighs for that millennium in his history to break upon his vision. "Then he will be happy," he tells us.

The man of business is making a pack-horse of himself, using up his health and strength, making a fortune, for what? So that he can retire from business, build him a fine house in the country, surround himself with birds, and fountains, and fish-ponds, and—be happy, with his wife and children.

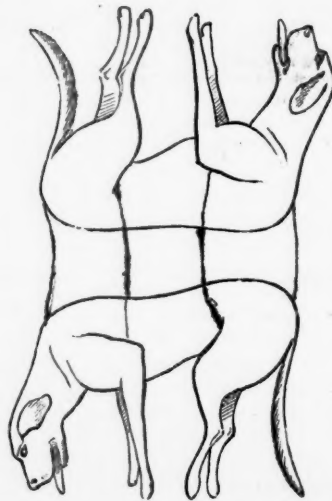
Yes, my young friends, and something whispers me that you, too, look forward to the time when you will have done with schools, and school books, and say, as you think of the time, "Ah, then I'll be as happy as the days are long."

Now, let me tell you a secret—a secret worth knowing. This looking forward for enjoyment don't pay. From what I know of it, I would as soon chase butterflies for a living, or bottle up moonshine for cloudy nights. The only true way to be happy, is to take the drops of happiness as God gives them to us every day of our lives. The boy must learn to be happy, while he is plodding over his lessons, the apprentice while he is learning his trade, the merchant while he is making his fortune. If he fails to learn this art, he will be sure to miss his enjoyment, when he gains what he sighs for.

### Problems.

[Last month the boys and girls were asked to excuse the Editor for a month or two—not because he would not enjoy a long monthly chat, but because this is a very busy season. It is his "harvest time." Pretty soon we shall be more at liberty—and then—well, you'll see. We introduce a new friend on the next page, whom all the girls will welcome. Grandmother has not yet quite got her hand in at using the pen, but will soon do so.]

Problem 31 has been answered correctly by only a few boys and girls, as yet, and we will wait for more to try it before giving the answers. By the way, those answers sent in differ very greatly. Better look over your figures again.



PROBLEM 32.—Add to the above picture four simple lines—two of them half an inch long, and the other two an inch long—and you will have two live dogs, both of them under full run. How many of you can add the four lines? We will give a new picture with the lines added, and the names of those who can answer it by their own ingenuity. It is not a new problem. We found it in an English book and put it in our drawer a year ago, with many others, old and new, yet to be brought out. It will be a good exercise for you to draw this and other figures upon a slip of paper, and then add the needed lines. You may look for other problems for these coming Winter evenings.

### AN ALPHABETICAL CHARACTER.

Somebody has put together the following alphabetical description of what one should be.

Amiable, Benevolent, Charitable, Domestic, Economical, Forgiving, Generous, Honest, Industrious, Judicious, Kind, Loving, Modest, Neat, Obedient, Pleasant, Quiet, Reflecting, Sober, Tender, Urbane, Virtuous, Wise, Exemplary, Yielding, Zealous.

This we should call a basket of pearls. Pick them up one by one, and pack them away in order in memory's storehouse; but bring them out very often for examination.





Grandmother's Afternoons with the Girls.

## NO. I.—TALK ABOUT MAKING BEDS.

Ah! here come my girls to visit with their old grandmother; and I'm happy to see your smiling faces. It seems like Spring time when your pleasant looks say so plainly, "we love grandmother." I feel young again as you gather round me, and I almost want to jump up and play "Puss in the Corner" with you, but the rheumatism won't allow it, and so I must sit in my rocking chair and chat with you.

How you all grow. Why, instead of little girls, I shall soon see young ladies around me, and every one will want to be a young lady that grandmother will be proud of.

What a fine chance you have to learn—good schools, and good books, and newspapers. Ah! they didn't have such times when I was a girl. But some things can't be learned from school-books. I wish my girls all to be good housekeepers as well as good scholars; to know how all the work should be done, even if they do not have to do it for themselves. Would you like to hear about grandmother's way to have the work done?

"Yes, yes; for then we'll know how to play keep house."

That's right; such plays will help you to grow up useful as well as happy. Well, a good housekeeper will know how to make a good bed, for that's a wonderful comfort, especially to old folks, and so I'll talk with you about that, to-day.

First, you want a good bedstead. I'm glad they have good ones now-a-days. Why, when I was a little girl, I had to climb up into bed as if I was hunting hen's nests on the hay mow. One night I dreamed I was falling down, down, oh, how far down! and thump I came on the floor, with a bruised head and a sprained shoulder. Fig. 2 is a nice bedstead, made in the French style. When father buys one, ask him to please get it like this; it need not cost more than the old-fashioned kind. See how low it is, not more than a foot or eighteen inches from the floor. Then, too, there are sideboards to keep you in. If your bedstead is high, ask father to please saw off the posts, so that you won't have such a tumble as I did. What will you fill the bed with?

"Feathers," "hair," "hunks," "straw."

Feathers are good in Winter but not in Summer. They will nestle around you like little goslings snuggling up to the old goose. This will keep you too warm and make you weak. Hair mattresses are best for Summer. It will be nice work for you this Fall to gather a large pile of corn husks and slit them fine, and they will make a very pleasant cool bed. Fresh oat straw covered with a cotton comforter is also good. Cotton makes the best bed clothes. Woolen is too heavy. I remember once dreaming I was a cheese in the press, and they pressed me so hard I was afraid the hoop would burst. When I awoke there were three heavy woolen blankets over me.

Sewing patch-work quilts is just the thing for beginners, and when nicely quilted they will be nicer than anything else for bed-clothing. Linen sheets are pleasant for Summer, but not warm enough in Winter.

## HOW TO MAKE THE BED.

A poor cook may spoil the nicest food, and an ignorant girl may spoil a good night's rest by making up the bed wrong. Every one ought first to open the windows if it

is not too stormy, and lay off the clothes on chairs to let them air, at least an hour. This will free them from the perspiration (or sweat) which has passed off from the body. It is neither neat nor healthy to sleep in a bed that is not properly aired. After airing, stir the straw well and lay it even, so that the bed will not feel like a pile of apples or corn cobs. The feathers should be shaken into the middle of the bed, and the bed be turned over. They should then be spread evenly, making the head a little higher than the foot. A good bed-maker always leaves the bed lying up loose. The bolster comes next; shake it up thoroughly, and lay it on smooth and lightly.

When we put the sheets on, the marked part should be placed at the head, so that the same end will always be near the face. Little girls will have to try a good many times before they can spread a sheet smoothly, with the seam exactly straight in the middle of the bed. It is very pleasant these cold nights to be well tucked in, so we must leave enough of the quilts on carefully, the prettiest one outside, your bed will be made.

"Oh, grandmother, you've forgotten the pillows." Sure enough, we must remember them, though if the bed has a high bolster, perhaps we can sleep better without them. But it is better to have pillows without the bolster. If both bolsters and pillows are used, they should not be made too large, for the neck should not be bent when we are lying down, because it prevents breathing



Fig. 2.

freely, and that is not healthy. Before we put on the pillows we turn down the quilts and the upper sheet, so that the pillows will just cover their upper edge. The loose part of the pillow case should be on the outside of the bed.

That's the way grandmother likes to have her bed made, and I hope, dear girls, that you'll have many a good night's rest on the beds she taught you how to make.

Well, I am tired now. You may run and play, and when I get rested I will have another talk with you about something else. I will try to tell you from time to time all about housekeeping.

## The Sewing Machines are Going.

We hear in various directions from persons who are filling up their lists to secure the valuable premium of a Sewing Machine. Thus, a letter just in says: "Save a Machine for me. I got the first 100 names far easier than I expected. The remaining forty-four, I shall get in two or three days more, in a neighboring town where I am acquainted."

Many others speak equally hopeful, and we are much pleased at what is being done in this way; first, because many families will thus be supplied with a valuable labor-saving implement, who might not get one otherwise—at least not so easily; and second, because by this means thousands of families will have the *Agriculturist* brought to their notice, who would not otherwise reap the advantages to be derived from its perusal; and thirdly, though this offer involves a pecuniary loss to us the first year, we expect ultimately to be benefited. We are working for the future quite as much as for the present, so far as pecuniary reward is concerned.

We must beg to correct a little distrust indicated by the queries of two or three persons, who have not been long enough acquainted with the *Agriculturist* to learn that the Publisher fulfills his promises to the letter. The Wheeler & Wilson Sewing Machines we offer are of the very best manufacture—not "second-hand or cheaply-made affairs, got up for distribution." For this premium

we ourselves select the best machines we can find among those sold by the Company, at \$50 each. We know these machines are first-rate—equal in every respect, as far as machinery and working capacity is concerned, to those sold for \$100. We say we know this, because within the past month we have purchased, for our relatives and friends, several of these same \$50 machines; and they have proved themselves right in every respect. They do not differ in perfection of working parts, from the \$125 machine which we have used in our own family for nearly a year past, with the greatest satisfaction.

We repeat: No Sewing Machines are made which are better adapted to general family use than the machines we offer. We have already secured a dozen, to be given as premiums, and have also contracted for as many more of the same kind as will be required. As some curiosity has been expressed, to know how we can afford to furnish so costly a paper at so low a price, and yet give so large a premium, we will explain that our general, large circulation pays expenses, and the additional subscribers obtained through this offer will only cost us the white paper, press-work, folding, and mailing; and, furthermore, the Sewing Machine Company, for the purpose of forwarding our enterprise, have generously offered the machines for this special purpose, at the lowest possible wholesale rates.

P. S.—A letter from a gentleman in Missouri, received since writing the above, says: "I can not see why a man with a house full of girls should not have one on the same terms as a lady."....He can. The ladies will get the benefit in any case—and the gentlemen too; for we know that that home will be a happier one for the father and brothers where the sewing is all done up by daylight, than the one where it must be "round" all the evening, and to a late hour. We at first offered this premium to ladies only, with the idea that many of them could and would do the canvassing without the aid of the men. But we now conclude to throw the offer open to all. Let hundreds, instead of dozens, take hold of the matter. Few persons can earn \$50 more easily, and at the same time forward so good an enterprise as that of stirring up a whole agricultural community to read a valuable work devoted to the development and improvement of their own calling.

## That Best of all Dictionaries,

"Webster's large Unabridged," is still offered as a premium to any person sending us forty subscribers for a year, (one-half or more of them new ones.) We know of no better prize than this. It contains nearly fourteen hundred large pages—the printed matter on each page being six and a half, by nine inches—and containing three closely-printed columns of valuable matter, giving full information upon about every word in the English language, besides the pronunciation of names of cities, towns and countries, and of Scripture and Greek and Latin names. The copies we offer are well and strongly bound in leather, and new from the publishers. The regular retail price is six dollars. We of course buy them in large quantities at wholesale prices, or we could not offer them as we do. They can be sent to almost any part of the United States—except to points remote from routes of travel—by express, for from twenty-five cents to one dollar. When sent by mail, prepaid, the postage is one cent an ounce, or one dollar and twelve cents, as the book weighs seven pounds.



Into which are thrown all sorts of paragraphs—such as NOTES and REPLIES to CORRESPONDENTS, with Useful or Interesting Extracts from their Letters, together with Gleanings of various kinds from various sources.

BASKET FULL—And running over. We are sorry to carry into next volume, notes upon some 200 letters—but the Index stretches out two pages more than we had planned for, when stereotyping the inside sheet. We are happy to announce that we expect soon to have the constant assistance of an additional competent office editor, and hope then to be more prompt in responding to the letters, notes, queries, etc., of correspondents.

Money Come—Names Wanted!—We have money-letters from S. L. BERANER (\$5) and T. R. MITCHELL (\$1), but nothing in or upon the letters or



envelopes gives us any clue to their Post-Offices. We often get such letters, and usually wait for a second scolding letter, before we know what to do with the money. It is impossible to always remember the Post-Office address of even our oldest subscribers, and it is impracticable to look over the sixty thousand names on our books to find a particular one. Please be careful to always give the name and full address.

**Manures.**—Guano, etc. Some 25 or 30 communications on these subjects are on hand. They are filed together to be attended to in one or two articles, thoroughly discussing the subject. Among these are letters from S. T., of Me.; Quereus, of Pa.; Mrs. L., of Pa.; Rondout, N. Y.; A. T. & G. G. I., N. Y.; D. B., Pa.; H. B. C., Del.; P. S. A., Ohio; R. K. T., N. J.; E. S. Z., Md.; A. M., of Union; A. D. G., N. Y.; O. P. N. Y.; Geo. T., N. Y.; R. T. O., Wis.; E. F. B., Wis.; L. H. O., Ill.; A. Van B., Warren Co.; E. A. D., Mass.; and others.

**Sundry Questions.**—A. H. B., Mass. Your questions, each require a lengthy reply, which can be given only as time and room may allow. The same remark applies to at least a hundred questions on hand from others.

**Italian Bees.**—Isaac Tremble, of Muskingum Co., Ohio, and one or two others, inquire where these can be had, and at what price. We know of none to be obtained as yet.

**Filtering Cisterns.**—A communication from Wm. Burnett, with drawings, is on file for insertion soon.

**Sewing Machines—A Correction.**—In our plain description of "How Sewing is done by Machinery," on page 57-58, we stated that "the Grover & Baker stitch can be unraveled, with a little care in getting hold of the two threads used." It having been construed by some of our readers that we intended by this to condemn the stitch, it is but justice that we should say this was not the case. We stated that "care," and we might have added, experience, is necessary in order to pull out the threads, which it is sometimes desirable to do when work is wrongly put together. The three principal Sewing Machines before the public, Wheeler & Wilson's, Grover & Baker's, and Singer's, each make a stitch sufficiently firm for all practical purposes.

**White Blackberries.**—Ohio subscriber. These are not new, but have been known for several years past, and have been frequently advertised in this journal—once or twice this year. We have seen none of them which appeared to be in any way superior to the black varieties—except for the novelty of the thing.

**Syringing the Borer.**—J. W. Hoyt, suggests that the borers might be destroyed by injecting a poisonous liquid into their holes, using a syringe closely fitting the cavity. This would be difficult. The condensed air and especially the packed chips in the cavity would resist the ingress of the liquid.

**Large Radish.**—E. Lawrence, of Dutchess Co., N. Y., brought to the *Agriculturist* office, Nov. 17th, a radish, which we found to weigh 6½ lbs. It was 15 inches in length and 21 inches in circumference. We opine this is hard to beat.

**Steam Cultivation in England.**—At the late Royal Agricultural Show, at Chester, the Judges unanimously awarded the Society's £500 prize (\$2000) to Fowler's Machine. The Judges in their report say: "It is beyond question that Mr. Fowler's Machine is able to turn over the soil in an efficient manner, at a saving, as compared with horse labor, of 24 to 25 per cent on light land; of 25 to 50 per cent on heavy land, and of 80 to 88 per cent in trenching—while the soil, in all cases, is left in a far more desirable condition, and better adapted for all the purposes of husbandry."

**The Comet.**—Several correspondents have requested "one of our plain, full descriptions of this visitor," with drawings, &c. We have, so far, found no room to do this.

#### Book Notice.

**LANDSCAPE GARDENING**, or how to lay out a Garden, from the Second London Edition; by Edward Kemp, Landscape Gardener, Birkenhead Park. First American Edition. Wiley and Halsted, New York, 1858.

This is a nice book, as might be expected from the accomplished hand of the designer and planter of that beautiful modern appendage to the wealthy city of Liverpool, England, opposite to which it lies, along the banks of the Mersey. We have had several works on this attractive subject from various authors abroad and at home; and while we read our own native Downing with delight, the foreigner Smith's attractive pages, coupled with our domestic Allen's notes, with evident instruction, we hail this recent work as a co-laborer in the arts of the natural and beautiful with decided relish.

In mechanical execution the book cannot be better, and for the matter it contains, is cheap enough. No one author can treat of every thing in his line with the thoroughness common to three or four different authors on the same subject, for the simple reason, that some particular branches more than others are his favorites, and he will inevitably give more marked attention to them, although meaning to be just to all. For that reason no student of the landscape or the garden can be thoroughly instructed without a close study of at least three or four well approved works.

There is much, of course, to be found in the volume before us, in the way of trees, shrubs, plants and soils, as well as climate, not strictly applicable to America, and which the practical American must alter to conform to his own circumstances; but the principles of his design and practice, in laying out, planting, training and cultivation are the same. For ourselves, we have looked over the pages of this work of Kemp with decided approbation, and heartily recommend it to that portion of our people, who are seeking, as so many now are, to render their homes attractive, pleasant and beautifully lasting.

#### The Steam Plow on Trial.

[The following Report was set in larger type for a preceding page, but crowded out by the Index. We insert it here, out of place, as it is timely.—Ed.]

Our intelligent Western contributor who looks especially after prairie matters, was present at the Trial of Steam Plows, under the auspices of the Illinois State Agricultural Society, at Decatur, Wednesday, November 10th, and furnishes the following report, with his impressions derived from a careful examination of the subject:—

The weather was very unpropitious, (it having rained for more than two weeks previous,) and was snowing during the afternoon. The ground was wet, soft and muddy—a condition very adverse to the trial of any implement. Three or more steam plows were expected, but owing to the weather and other causes, only one arrived upon the ground, viz.: that of Mr. Fawkes, of Lancaster county, Pa. This engine or machine, consists of a frame-work resting on one driving wheel and two guiding wheels. On this frame-work rests the boiler, upright, with fire-box underneath; a tank and place above for wood or coal. The boiler contains one hundred and fifty-one flues, and the engine is of twenty-horse power. The tank was intended for a smaller engine and holds five barrels of water. The consumption of water is estimated by the inventor at one-and-a-half barrels an hour; of wood, one cord a day.

The cylinders, one on each side, are eight inches. The driving wheel resembles a drum or barrel, six feet long and five feet diameter, and is worked by cog-wheels on each end. The forward guide-wheels are broad and about three feet high, their axle being turned by a (tiller) wheel under the control of the engineer. The machine weighs, loaded, about seven tons, and carries an engineer to manage the engine, and a fireman, who also attends the plows. The plows are attached to a frame-work made fast to the locomotive behind, and are capable of being lowered and raised by chains running over pulleys and worked by the steam power.

The trial was not as satisfactory as could have been desired, owing to the absence of most of the committee, and a want of proper management on the part of those who were present. The machine operated very well upon sward, wet and soft, turning six furrows, each twelve inches wide and about five inches deep. When tried upon stubble land, the plows, which were not constructed with cutters, choked up with grass and weeds.

Another trial, on very wet, slippery sward, proved unsuccessful, the inventor not having any spuds in his driving-wheel; these he intends putting in. Taken as a whole, a success was attained beyond any similar experiment with a

new machine, and the multitude who braved the cold storm of rain and snow, though disappointed in some respects, yet left under the conviction that plowing by steam was an established fact. Another trial, on the following day, at which I was not present, I understand to have been most successful; but I have as yet received no full account.\*

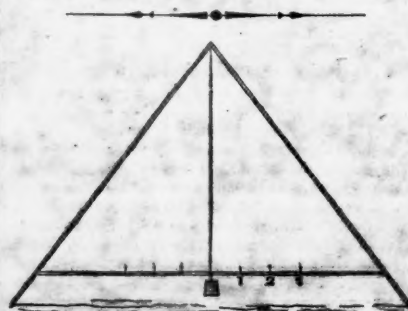
It may, perhaps, be premature to express any decided opinion in regard to this new adjunct to farm labor. After I have seen the plow tried upon soft (i. e., newly-plowed old land) and upon land tilled in corn (i. e., ridged more or less), then my opinion as to its real value to the farmer can be formed.

As a stationary engine it can be used to every advantage. The fuel can be drawn to the field by the machine itself, and a cistern, mounted on timber wheels, of a capacity to hold enough water for one or two days, can be made fast behind the locomotive and drawn to the field. The cost of a ten-horse engine plow in full, will be in the neighborhood of \$1,500; and for a twenty-horse power, \$2,500. This machine could be used in preparing the ground, seeding or planting, har vesting, threshing, and, provided there were suitable roads, hauling the grain or produce to market. Horses would need to be employed in tilling or tending the crops.

The main advantages (not small either) are the speedy manner in which a crop could be planted and harvested. Every man capable of thinking rationally can form his own opinion in regard to this new "rage" of inventors—Steam Plows. Let us hail with acclamation the advent of any machine that will lessen the labor of man, woman, or beast. Many other inventors promise shortly to be in the field with steam plows, and I think what Brother Jonathan undertakes, he will accomplish. H. H.

Prairie Cottage, Nov. 15th, 1858.

\* We have from another correspondent a brief note, stating that the second day's trial was a decided improvement over that of the first day, and was really successful.—Ed.



A Simple Leveling Implement.

To the Editor of the *American Agriculturist*:

On page 199, of Volume XVI., you describe a simple "Leveling Instrument." I think the most convenient implement of the kind I have seen, is one which was used by our ancestors for leveling water courses in the first settlement of the country, and which has been used by some of their descendants ever since. The sketch sent herewith shows its form. [We have made an engraving of it, above.—Ed.] I have used this kind occasionally for sixty years. It is made thus:

Take three strips of straight-grained inch boards, say eleven feet long and two or three inches wide, and nail them together as represented in the figure. Set it on the floor with a plumb line and weight suspended from the apex. By turning it round from end to end, the exact



centre can be found. Then by lowering one end, it will be easy to find where the line will hang for a fall of say, one, two, or three inches in a rod, or any other chosen distance. The cross-pieces can then be marked for these distances. You have then only to set down the implement at any point, and sight along the cross-piece, lowering or raising one end until it ranges to the point desired. The position of the plumb-line will at once show the relative level of the two places. The spaces between the figures may be divided into halves, fourths, or even twelfths.

THOS. DARLINGTON.

Chester County, Pa.

### Catalogue of Seeds for Free Distribution in 1859.

Each person whose subscription to the American Agriculturist is paid beyond February, 1859, will be entitled to select three parcels of seeds from the general list given in the next column. (If only flower seeds are chosen, five parcels may be selected by each person—or three of flowers, and one other kind.)

Some additions may be made to this list next month. See remarks on page 358.

A. It is of absolute importance that the following directions be strictly followed, even to the minutest particulars. We have 73 distinct varieties of seeds, to be distributed among 50,000 or more persons scattered all over the country, which, at the best, will involve immense labor; and some mistakes must unavoidably occur, unless each subscriber take special pains to facilitate the work.

B. The seeds can be called for at the office, or be sent by express, or in ready prepared envelopes to be furnished by the subscriber, as described below.

C. Subscribers at different points can estimate whether they can receive their seeds cheapest by Mail to separate individuals, or in a package by Express.

D. If to go by Express, no envelopes will be needed. In that case, simply send us a written list of the names, marking against each name the kinds of seed desired, using the numbers in the Catalogue. Keep a duplicate of the list sent, and give particular directions, on the list, how the packages are to be forwarded, and to whom directed.

E. If to go by mail, the applicant will (of course) furnish prepaid envelopes, of ordinary size, which should be prepared as in the engraving here given—that is: Put the figures corresponding to the Catalogue plainly on the upper left hand of the envelope, and put all the postage stamps upon the right side of the envelope—one above the other when two or more are needed, as shown in this pattern. This will prevent the seeds being crushed in the stamping process, in the Post-Office. One ordinary envelope will generally hold the amount of seed-packages carried by two or three stamps. *The amount of stamps can be calculated from the Catalogue. Single 1-cent stamps on letters are of no value, unless there be even three of them, as letter postage is rated by the half ounce.*

F. Let letters referring to seeds be as brief as possible, and yet plain. All such communications are referred directly to the clerk superintending that department. It is especially desirable that whatever relates to seeds should be on a separate slip of paper. (We shall probably distribute over two hundred thousand packages, and a minute's time saved on each of these would amount to 333 working days of 10 hours each—more than a whole year!)

G. Canada, California and Oregon subscribers will need to substitute 10-cent stamps in all cases where 3-cent stamps are named in the catalogue. When several sent together from Canada, it will usually be cheaper to receive the seeds by Express. (Postage need not necessarily be prepaid here, on Canada letters.)

H. Always put the stamps upon the envelopes, and not drop them loosely into the enclosing letter.

I. It is always better to send envelopes of the ordinary size, and made after what is called the "Government pattern"—that is, those in which the back comes under the piece lapping over; these seal up more firmly. This point is not essential, however.

J. Usually, the lighter the envelop the better, that more seeds may go under the same stamps.

K. Send only the number of stamps required for postage on the seed. We have no seeds of any kind to sell.

L. Those forwarding unpaid envelopes will of course not be disappointed if they do not return. We offer seeds free, but cannot, in addition, afford to pay postage also.

M. All seeds sent by mail are put up at our country residence, and each package is there mailed direct, to avoid its being overhauled at the Distributing Offices.

N. We shall take time to mail all the seeds carefully and regularly. This will occupy the entire months of January and February. Those going to subscribers on the Pacific Coast, and in Southern States where the seasons are earlier, will be mailed first, and with dispatch. To others they will go as fast as the putting up and mailing can be accomplished—but to all in ample season for Spring planting and sowing.

#### LIST OF SEEDS.

##### Field Seeds.

- 1—White Sugar Beet—Single or double packages, as may be desired, requiring one or two 3-cent postage stamps.
- 2—King Philip Corn—Single, double, or triple packages, as may be desired, requiring one, two, or three 3-cent stamps.
- 3—Stowell's Sweet Corn—Same packages as No. 1.
- 4—White Poland Oats—Same packages as No. 2.
- 5—Chinese Sugar Cane—Any subscriber may select any amount, from half an ounce up to a full pound of this, by providing for the transportation by mail, or express, or otherwise. If to go by mail, a 3-cent stamp must be sent for each half ounce. No prepared envelopes will be needed if the address be plainly given.
- 6—Ashcroft's Swedish Turnip—Half of 3-cent stamp.
- 7—River's Swedish Stubble Turnip—do. do.
- 68—Purple-top Scotch, or Bullock Turnip—do. do.
- 69—Green-top Scotch, or Bullock Turnip—do. do.
- 70—Waite's London purple-top Swede Turnip—do. do.
- 73—Hungarian Grass—One 3-cent stamp.

##### Vegetable or Garden Seeds.

- 8—Daniel O'Rourke Pea—Packages same as No. 1.
- 9—Champion of England Pea—One 3-cent stamp.
- 10—British Queen Pea—do. do.
- 11—Hair's Dwarf Mammoth Pea—do. do.
- 59—King of the Marrows Pea—do. do.
- 21—Winter Cherry—One-third of a 3-cent stamp.
- 13—Enfield Market Cabbage—do. do.
- 14—Alma Cauliflower—do. do.
- 15—Mammoth Cabbage Lettuce—do. do.
- 17—Red Strap-Leaf Turnip—One-half of a 3-cent stamp.
- 19—Round Spinach—do. do.
- 20—Salsify—do. do.
- 22—Boston Marrow Squash—do. do.
- 55—White Globe Onion—do. do.
- 72—Imported Brussels Sprouts—do. do.
- 73—Egg Plants, (mixed)—do. do.
- 74—Solid White Celery—do. do.
- 75—Green Curled Endive—do. do.
- 76—Musk Melon—do. do.
- 77—Water Melon—do. do.
- 92—Okra—do. do.
- 16—Long Orange Carrot—do. do.
- 71—Long White French Turnip—One 3-cent stamp.

##### Flower and Ornamental Seeds.

Of these any subscriber may choose three parcels, with one of those above; or five parcels, with none of the above. The Flower and Ornamental Seeds are put up in small packages, the amount in each depending upon the variety of the seeds, their size, the number required for a common flower-bed, etc.

- 39—Marvel of Peru—One-third of a 3-cent stamp.
- 45—Sweet Pea—do. do.
- 46—Mixed Lupins—do. do.
- 89—Cotton Plant (2 kinds)—One 3-cent stamp.
- 90—Norway Spruce Seed—One-half of a 3-cent stamp.
- 91—Arbor Vita Seed—do. do.

On an average, about five of the following 32 varieties will go under a 3-cent postage stamp.

- |                           |                          |
|---------------------------|--------------------------|
| 23—Mignonette.            | 47—Morning Glory, mixed. |
| 25—Mixed Nasturtiums.     | 48—Flos Adonis.          |
| 27—Extra Coxcomb.         | 49—Candy Tuft.           |
| 28—Dwarf Rocket Larkspur. | 50—Schizanthus.          |
| 29—Double Balsam, mixed.  | 51—Phlox Drummondii.     |
| 30—Tassel Flower.         | 78—Ageratum Mexicanum.   |
| 31—Chinese Pink.          | 79—Germ. 10-weeks Stock. |
| 32—Portulacas, mixed.     | 80—Yellow Hawkweed.      |
| 33—Cypress Vine.          | 80—Canary Bird Flower.   |
| 24—China Asters, mixed.   | 82—Thunbergia.           |
| 35—German Asters, mixed.  | 83—Snap-Drum.            |
| 37—Zinnia Elegans.        | 84—African Marigold.     |
| 38—Sweet William.         | 95—Gaillardia, mixed.    |
| 40—Escholtzia California. | 86—Euphorbia, mixed.     |
| 41—Elegant Clarkia.       | 87—Coreopsis.            |
| 42—Foxglove.              | 88—Globe Amaranth.       |

### PREMIUMS!

We purpose to make the next volume of the *Agriculturist* far superior even to the present one, in greater variety of topics, in more and better engravings, in short in every respect. We also desire to extend its circulation into tens of thousands of families where it is now unknown. To accomplish this, we offer to those who will assist in the work, the following premiums, which are certainly liberal, if the cost of the paper, and the low price at which it is furnished be taken into account.

It will be seen that the Premiums in each case (except No. X) depend upon a given number of names, and not upon competition between unknown persons; so that every person knows exactly what he or she is working for.

**Premium I.**—A liberal distribution of valuable seeds will be made during next Winter, to ALL regular subscribers alike, whether single or in clubs, and whether received from agents, or otherwise.

**Premium II.**—We have some pieces of the genuine Atlantic Cable—each piece being four inches in length, with the ends secured by brass ferules. One of these will be presented to each of the first received clubs of six subscribers at \$5. (N. B.—Twenty-one cents extra must be sent to pre-pay postage on the Cable.)

**Premium III.**—Any person sending in a club of 10 subscribers at \$8, may order a free copy of either Vol. XVI or Vol. XVII, which will be sent in numbers post-paid.

**Premium IV.**—Any person sending 15 subscribers and \$12, will be entitled to 16 copies (that is one extra copy), for the coming year.

**Premium V.**—Any person sending 25 subscribers and \$20, will be entitled to both Volumes XVI and XVII, sent in numbers post-paid. (N. B.—If \$21 be sent, the two Volumes will be bound neatly in one cover, and forwarded post-paid.)

**Premium VI.**—Any person sending in \$24 for 30 subscribers, one-third or more of them new ones, will be entitled to a silver cased Microscope, with the celebrated "Coddington lens"—the same as fig. 4. in July No., page 219. Price \$4. (It will be safely packed and sent by mail, post-paid.)

**Premium VII.**—Any person sending \$32 for 40 subscribers, (one-half new names), will be entitled to the large unabridged Webster's Dictionary, containing 1,376 3-column pages—the best and most complete work of the kind in the world. Price \$6. (It weighs 7 lbs., and can be sent by express or by mail at the expense of the recipient, after leaving the city.)

**Premium VIII.**—Any person sending in \$50 for 100 subscribers, (one-half new) will be entitled to each of the six above premiums, numbered 1, 2, 4, 5, 6 and 7.

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**Premium IX.**—Important Change.—In consequence of the reduction in the price of the Best Sewing Machines, we are able to reduce the terms of the premium materially. That is to say: Any person or company of persons sending in 144 new subscribers at the lowest club price (50 cents each) will be presented with one of Wheeler & Wilson's best \$50 Sewing Machines, new from the manufactory. These \$50 machines are just as good for all working purposes as those recently sold at \$100. No better working machines are made. We consider this an excellent chance for hundreds of ladies to secure an invaluable prize at a little outlay of time and effort. The names can be easily gathered in single towns or in two or three adjoining ones (they need not all be at the same Post office). A committee of ladies may unite their efforts and secure a Sewing Machine as common property with as little solicitation or trouble as they could get up a Fair, and all they get above 50 cents each will be clear gain. Perhaps they can enlist their brothers, husbands or other male relatives to aid them. Last year we received subscribers enough from single Post offices in Illinois, and elsewhere, to secure this premium. (See remarks below.)

**Premium X.**—The Lady or company of Ladies sending the largest list of names above 144 will be presented with a higher priced machine, that is one put up in an extra case.

**Remarks.**—It will be noticed that any person trying for one of the higher premiums, and failing to get names enough, can still take one of the lower ones, according to the number of names obtained.

Every person collecting names for premiums can send them in with the money as fast as received; but if designed for premiums, a double list of the names should be sent, one of them marked at the top, "For premiums," and with the name of the sender. These duplicate list



will be kept on file by themselves to be referred to in making up the premium lists, when any person has completed sending in names for Volume XVIII.

We do not set any time for the completion of the lists, it being understood that these premiums are only for subscriptions for volume XVIII (1899), whenever received. The premiums will be paid as soon as the names are received.

Our offer of extra numbers to those subscribing now, renders it practicable to begin the canvassing at once.

#### The \$200 Offered for Best Articles

On Fencing and Dairying, (\$100 each,) to be published in next Volume, is being competed for by quite a number of practical men. From the contributions already at hand we could select those which would be found highly valuable to our readers—and all are not yet in. These articles alone will be worth the price of the volume, to most persons, though they will occupy comparatively a very small portion of each number. At least twenty times \$200 will be paid for editorial help in getting the best possible materials for Volume XVIII.

#### "Published to Do Good and Make Money,"

Was the motto upon the title-page of Beckwith's New-Haven Almanac. That is about our motto. We have not cleared anything yet by publishing this journal, but we trust some good has been done, and we hope yet to make some money—enough to buy just the farm we want to live and die upon,—and at the same time keep the *Agriculturist* going upward in character and sterling value. A still wider circulation will accomplish both of these objects. Who will help in the matter?—"Every present subscriber."—That sounds well.

#### Holiday Gift.

What more appropriate present for a relative or friend than a copy of the *Agriculturist* for 1899? To facilitate such an object, we will take any orders forwarded, and make out a receipt to the recipient (with the name of the donor upon it, if desired,) and mail it with a December copy at such a date that it will reach the person to whom it is sent about Christmas or New-Year's, or before, as may be directed.

#### Only Eighty Cents a Year.

Please look over the Index and decide for yourself whether you would part with the information derived from this Volume for one dollar. Then please accept our assurances that the next Volume will be a decided improvement upon this, and we think no one will want a moment to decide as to renewing his or her own subscription and bringing as many friends and neighbors along as possible. Further, as a pecuniary consideration, it may be well to remind the reader, that if a club of ten or more be made up, the price of the Volume will be only eighty cents, saying nothing of the seeds, etc. We suppose there is hardly a neighborhood where there are not at least ten families who would gladly read the *Agriculturist*, if they knew what it is. Will some of those who do know it, please tell them?

#### Bank Bills.

Bills on all solvent or specie-paying Banks, in the United States and British Provinces, will be received at par, for subscriptions to the *Agriculturist*.

#### Bound Volumes—Binding—Covers.

Immediately on the issue of this number, we shall bind up several sets, of Vols. XVI and XVII, singly, and also both volumes in one cover. The prices of these will be:

Vol. XVI, or Vol. XVII, unbound, \$1.00 each.

do neatly bound, \$1.50 each.

Volume XVI and Vol. XVII neatly bound in one cover, \$2.60 N. B.—These volumes unbound can be sent by mail, pre-paid, at \$1.12 per volume. If bound the postage (which must be pre-paid) is 42 cents for volume XVI, and 50 cents for Vol. XVII, making the cost of Vol. XVI bound and sent pre-paid by mail, \$1.92, and of Vol. XVII, \$2.00.

Cost of Vols. XVI and XVII bound together and sent by mail post-paid, \$3.40.

Of Vol. XV, we have no copies, and unfortunately, no stereotype plates. Any one having a copy of volume XV to spare will be paid \$1.25 cash for it in sheets, or \$1.75 if bound, providing it be in order.

Of Vols. XII, XIII and XIV, we have some sets bound and unbound, at the same prices as named above for Vols. XVI and XVII.

BINDING.—Sets of numbers brought to this office will be bound up neatly (in our regular style of binding the *Agriculturist*) for 50 cents a volume. Vols. XVI and XVII will be bound together in one cover, for \$1.00.

PREPARED COVERS.—Stamped Muslin Covers, neatly made with names, &c., gilt upon the back, and ready for the insertion of the sheets by any book-binder, can be furnished for Vols. XII to XVII inclusive, at 25 cents per volume. They can not well go by mail.

#### The Index.

Which, though as condensed as possible consistent with completeness, occupies a large space, and contains more than two thousand references. It can be separated and bound at the beginning of the Volume. Those who keep the numbers and do not bind them, will find it advantageous to arrange them in order and sew them together with strong twine.

#### A Great Convenience

It will be, as it will greatly facilitate the regular mailing of the January number, if our friends will send in renewals and new names early this month—before the 15th, if possible. When new names are sent, the December number will be forwarded in acknowledgment of the receipt of the money. The mailing of the January number will be an acknowledgment of payment therefor.

#### A Short "Baker's Dozen."

So far we have given the long "baker's dozen," (fourteen for twelve,) to new subscribers—that is, to new names sent in for 1899, prior to December 1st, the November and December numbers have been furnished. Those new names arriving during this month, will receive this (December) number free.

#### Postage—Positively only 6 Cents a Year.

Why will certain Postmasters insist upon charging 12, 18, and in some cases 24 cents yearly postage, when the law expressly says a Periodical weighing not over three ounces shall be charged one cent per number, and only half this sum if pre-paid quarterly in advance at the office where received. The *Agriculturist* weighs a fraction less than 3 ounces, if weighed when dry and without the wrapper, as it legally should be. The Department has over and over decided this matter thus, and the decision we have published, yet continued complaints come to us of double, triple, and even of six times these rates being charged. We now forward such complaints directly to Washington.

### American Agriculturist.

(ISSUED IN BOTH ENGLISH AND GERMAN.)

A THOROUGH GOING, RELIABLE, and PRACTICAL Journal, devoted to the different departments of SOIL CULTURE—such as growing FIELD CROPS; ORCHARD and GARDEN FRUITS; GARDEN VEGETABLES and FLOWERS; TREES, PLANTS, and FLOWERS for the LAWN or YARD; IN-DOOR and OUT DOOR work around the DWELLING; care of DOMESTIC ANIMALS &c. &c.

The matter of each number will be prepared mainly with reference to the month of issue and the paper will be promptly and regularly mailed at least one day before the beginning of the month.

A full CALENDAR OF OPERATIONS for the season is given every month.

FOUR to FIVE hundred or more, Illustrative ENGRAVINGS will appear in each volume.

Over SIX HUNDRED PLAIN, PRACTICAL, instructive articles will be given every year.

The Editors and Contributors are all PRACTICAL, WORKING MEN.

The teachings of the *AGRICULTURIST* are confined to no State or Territory, but are adapted to the wants of all sections of the country—it is, as its name indicates, truly AMERICAN in its CHARACTER.

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#### TERMS—INVARIABLY IN ADVANCE.

One copy one year.....\$1 00

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Ten or more copies one year...\$0 cents each.

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In addition to the above rates: Postage to Canada 6 cents, to England and France 24 cents, to Germany 24 cents, and to Russia 72 cents per annum.

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Postage anywhere in the United States and Territories must be paid by the subscriber, and is only six cents a year, if paid in advance at the office where received.

Subscriptions can begin Jan. 1st, July 1st, or at any other date if specially desired.

The paper is considered paid for whenever it is sent, and will be promptly discontinued when the time for which it is ordered expires.

All business and other communications should be addressed to the Editor and Proprietor,

ORANGE JUDD,

No. 189 Water st., New-York.

#### Show-Bills.

We have a new, large and beautiful *Agriculturist* show-bill, illustrated with forty-four engravings. Copies have been sent to several Post-Offices. Other copies will be forwarded, post-paid, to News Dealers, or others who may desire to use them in procuring subscribers.

### Business Notices.

Fifty Cents a Line.

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NEW STYLE, PRICE \$50.

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This is the only stitch that can not be raveled, and that presents the same appearance upon each side of the seam. It is made with two threads, one upon each side of the fabric, and interlocked in the center of it.

**GOOD NEWS.**—A reduction in the prices of Sewing Machines is announced in our advertising columns. We have heretofore expressed the opinion that the prices of this invention have been too high—so high as to place them beyond the reach of many whom they would most benefit. Their utility is established beyond question, and at the present prices we see no reason why they should not be found, as they ought to be, in every household. Several varieties are manufactured adapted to various purposes. So far as public opinion has been formed and uttered, the preference is emphatically accorded to the Wheeler and Wilson machine for family use, and for manufactures in the same range of purpose and material. During the present Autumn the trials have been numerous, and all the patents of any pretension have been brought fairly into competition. In every case, the Wheeler and Wilson machine has won the highest premium. We may instance the State Fairs of New-York, New-Jersey, Pennsylvania, Kentucky, Illinois, Wisconsin and California, and the fairs of the Cincinnati, Detroit, Chicago and St. Louis, Institutes, already held. At the fair of the St. Louis Mechanical Association the committee consisted of twenty-five ladies of the highest social standing, who without a dissenting voice awarded for the Wheeler and Wilson machine the highest and only premium, a silver pitcher valued at \$75. If these facts do not establish a reputation, we know not what can.—*Christian Advocate and Journal.*

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Agencies in all the principal Cities and Towns in the United States.

#### Market Review, Weather Notes, &c.

AMERICAN AGRICULTURIST OFFICE,  
NEW YORK, Nov. 24, 1898

Early in the month, receivers of the leading kinds of Breadstuffs appeared disposed to store their supplies, anticipating a rise in prices. The demand was animated, and an advance was established. Subsequently, heavy receipts had the effect of lessening the inquiry, especially from the home trade, and more willingness to sell was manifested by holders. Prices consequently were depressed, and at the close of our report, buyers of Flour, Wheat, Barley and Oats, have any existing advantage. The demand is very moderate, and the more general opinion at present is that a further decline is inevitable. The stocks of Flour and Wheat in store here are unusually heavy, and should the confidence of holders be shaken, a serious break down in the market would be the result. At present, it is only by the firmness of the leading holders that the receding tendency of prices is checked. The want of a satisfactory export demand tells badly, for producers. It is best that they should be made aware of this, and be governed accordingly. Money is so plenty and cheap in the great business centers, just now, that speculators are enabled to hold on to supplies, hoping for an advance in prices. A tightening of the screws in the money market, however, would put an end to most of this confidence, and then the pressure to sell, would be so great, that the value of what might be for sale would suffer a material reduction. These are the views entertained by the oldest and steadiest merchants frequenting our Corn Exchange. And the fact that they are not disposed



to operate freely, for one result or another, is the best proof of their sincerity....The canals are likely to be closed soon, and receipts must diminish. But there is enough produce at the sea-board, to prevent anything like want....Cotton declined early in the month. For a week past, a better inquiry has prevailed at rising prices. Our available supply is 24,398 bales, against 4,024 bales same period last year. The receipts at all the shipping ports, to latest dates this season, have been 896,011 bales, against 352,117 bales to the corresponding period of last season. The total exports from the United States so far this season have been 295,861 bales, against 180,368 bales the same date last season. The total stock on hand and on shipboard in the shipping ports, at the latest dates, was 507,573 bales, against 213,335 bales at the same time last year. The stock in the interior towns at the latest dates was 127,035 bales, against 37,997 bales at the corresponding date a year ago....The movements in Provisions, Groceries, Hops, Seeds, and Domestic Tobacco, have been moderate....Hemp has been very dull....Wool has been in active demand at advancing rates. Desirable lots of domestic growth are scarce, in nearly all the markets along the Atlantic coast....In other commodities there has been little variation during the month.

**RECEIPTS.** Flour, Wheat, Corn, Rye, Barley, Oats.  
24 bus. days this mon., 487,200 931,295 668,283 26,748 334,548 197,265  
28 bus. days last mon., 556,781 594,092 999,813 25,106 209,425 301,492

**SALES.** Flour, Wheat, Corn, Rye, Barley, Oats.  
24 business days this mon., 332,167 467,400 661,666 28,400 247,700  
28 business days last mon., 879,616 326,017 1,193,250 56,327 300,700

EXPORTS FROM N. Y., FROM JAN. 1ST, TO NOV. 22.

|                        | 1857.     | 1858.     |
|------------------------|-----------|-----------|
| Wheat Flour, bbls..... | 927,263   | 1,304,030 |
| Rye Flour, bbls.....   | 3,650     | 4,050     |
| Corn Meal, bbls.....   | 44,910    | 60,043    |
| Wheat, bush.....       | 3,192,259 | 3,257,871 |
| Corn, bush.....        | 1,917,339 | 1,643,769 |
| Rye, bush.....         | 81,446    | 12,487    |

#### CURRENT WHOLESALE PRICES.

|   | Oct. 25.      | Nov. 24.      |
|---|---------------|---------------|
| Flour—Super to Extra Star \$4 20 @ 4 35 | \$4 20 @ 4 35 | \$4 20 @ 4 35 |
| Common to Fancy Western.....            | 4 45 @ 4 70   | 4 25 @ 4 85   |
| Extra Western.....                      | 4 45 @ 4 80   | 4 65 @ 4 80   |
| Fancy to Extra Genesee.....             | 5 00 @ 5 75   | 5 35 @ 6 00   |
| Mixed to Extra Southern.....            | 5 00 @ 5 60   | 5 10 @ 5 75   |
| RYE FLOUR—Fine and Super.....           | 3 15 @ 4 00   | 3 30 @ 4 25   |
| CORN MEAL.....                          | 4 10 @ 4 85   | 3 75 @ 4 25   |
| WHEAT—Canada White.....                 | 1 08 @ 1 25   | 1 20 @ 1 45   |
| Western White.....                      | 1 08 @ 1 35   | 1 18 @ 1 50   |
| Southern White.....                     | 1 12 @ 1 35   | 1 25 @ 1 50   |
| All kinds of Red.....                   | 68 @ 1 12½    | 76 @ 1 30     |
| CORN—Yellow.....                        | 71 @ 86       | 84 @ 86       |
| White.....                              | 82 @ 86       | 84 @ 86       |
| Mixed.....                              | 63½ @ 68½     | 74 @ 76       |
| OATS—Western.....                       | 47 @ 49       | 49 @ 51       |
| State.....                              | 44 @ 46       | 46 @ 48       |
| Southern.....                           | 35 @ 40       | 40 @ 44       |
| RYE.....                                | 85 @ 1 09     | 72 @ 77       |
| BARLEY.....                             | 85 @ 1 09     | 73 @ 79       |
| White Beans.....                        | 1 05 @ 1 10   | 1 12½ @ 1 25  |
| HAY, in bales, per 100 lbs.....         | 50 @ 70       | 45 @ 70       |
| COTTON—Midlings, per lb.....            | 12½ @ 12½     | 11½ @ 12      |
| RICE, per 100 lbs.....                  | 2 75 @ 3 75   | 2 62½ @ 3 62½ |
| HOPS, crop of 1858 per lb.....          | 10 @ 10       | 10 @ 10       |
| PORK—Mess, per bbl.....                 | 16 35 @ 16 40 | 17 30 @ 17 40 |
| Prime, per bbl.....                     | 14 00 @ 14 10 | 13 75 @ 14 00 |
| BEER—Repacked Mess.....                 | 9 50 @ 10 00  | 9 75 @ 10 00  |
| Country mess.....                       | 9 50 @ 10 00  | 9 75 @ 10 00  |
| Hops, dressed, per lb.....              | 10½ @ 11½     | 10½ @ 11½     |
| Lard, in bbls, per lb.....              | 12 @ 12       | 12 @ 12       |
| BUTTER—Western, per lb.....             | 12 @ 12       | 12 @ 12       |
| State, per lb.....                      | 15 @ 15       | 15 @ 15       |
| CHEESE, per lb.....                     | 9½ @ 10       | 9½ @ 10       |
| Eggs—Fresh, per dozen.....              | 18 @ 18½      | 20 @ 21       |
| FEATHERS, Live Geese per lb.....        | 44 @ 52       | 44 @ 52       |
| SEED—Clover, per lb.....                | 9½ @ 10½      | 9½ @ 10½      |
| Timothy, per bushel.....                | 1 75 @ 2 50   | 2 00 @ 2 62½  |
| SUGAR, Brown, per lb.....               | 5½ @ 6        | 5½ @ 6        |
| MOLASSES, New-Orleans, per lb.....      | 30 @ 40       | Nominal       |
| COFFEE, Rio, per lb.....                | 9½ @ 12       | 9½ @ 12       |
| TOBACCO—Kentucky, &c, per lb.....       | 7 @ 15        | 6½ @ 14       |
| Seed Leaf, per lb.....                  | 6 @ 25        | 6 @ 25        |
| WOOL—Domestic fleeces, per lb.....      | 30 @ 50       | 30 @ 55       |
| Domestic, pulled, per lb.....           | 28 @ 40       | 30 @ 45       |
| HEMP—Undried American, per ton.....     | 120 @ 140     | 115 @ 135     |
| Dressed American, per ton.....          | 175 @ 200     | 170 @ 190     |
| TALLOW, per lb.....                     | 9½ @ 10       | 9½ @ 10       |
| Oil, CARE, per ton.....                 | 32 50 @ 41 00 | 31 00 @ 35 00 |
| POTATOES—French Blue.....               | 1 75 @ 2 25   | 1 62 @ 2 25   |
| Mercers, per bbl.....                   | 1 25 @ 1 75   | 1 37 @ 2 00   |
| Jones and Dykemans, per bbl.....        | 1 00 @ 1 37   | 1 00 @ 1 37   |
| Sweet Virginia, per bbl.....            | 1 25 @ 1 50   | 1 50 @ 1 75   |
| Sweet Camden, per bbl.....              | 75 @ 1 00     | 2 75 @ 3 00   |
| TURKISH—Husabags, per bbl.....          | 1 25 @ 2 00   | 2 00 @ 3 00   |
| ONIONS, per bbl.....                    | 1 50 @ 4 00   | 1 50 @ 4 00   |
| CABBAGES, per 100.....                  | 50 @ 75       | 1 25 @ 1 50   |
| SQUASHES, Marrow, per bbl.....          | 4 00 @ 6 00   | 5 00 @ 8 00   |
| PUMPKINS—Cheese, per 100.....           | 10 00 @ 12 00 | 12 00 @ 15 00 |
| CRANBERRIES, per bbl.....               | 1 50 @ 2 00   | 2 00 @ 2 50   |
| APPLES—Common, Per bbl.....             | 2 25 @ 3 00   | 3 00 @ 3 50   |
| Prime winter, Per bbl.....              | 4 00 @ 6 00   | 4 00 @ 6 00   |
| QUINCES—Prime, per bbl.....             | 14 @ 14       | 1 @ 10        |
| POULTRY—Fowls, per lb.....              | 8 @ 10        | 8 @ 10        |
| Chickens, per lb.....                   | 8 @ 10        | 8 @ 10        |
| Ducks, per lb.....                      | 14 @ 15       | 10 @ 12       |
| Turkeys, per lb.....                    | 8 @ 12        | 8 @ 9         |
| Partridge, per pair.....                | 75 @ 1 00     | 56 @ 63       |
| Prairie Hens, per pair.....             | 1 25 @ 1 00   | 75 @ 1 00     |
| Rabbits, per pair.....                  | 12 @ 12½      | 25 @ 37       |
| Venison—Caracas, per lb.....            | 12 @ 12½      | 8 @ 10        |

**N. Y. Live Stock Markets.**—The CATTLE MARKETS have been even more abundantly supplied than during the previous month. The city receipts for five markets past have been 23,922 bullocks, or a weekly average of 4,784. Prices have gradually declined, and just now—the week after Thanksgiving—beef is excessively cheap, and large numbers were left unsold Nov. 24, when they ranged at 9c. @ 24c. for prime; 7c. @ 8c. for medium; 6c. @ 7c. for poor; and for scallaws—which were plenty—from 6c. @ 4c. down to nothing. Average of all sales about 7c. per lb. for the estimated dressed weight.

**SHEEP AND LAMBS.**—Receipts have been lighter during the past month. They number 57,643—more than sufficient for the requirements of the market with the present abundance of dead mutton now coming in. Prices are depressed, good sheep bringing but 3c. @ 4c. live weight.

**HOGS.**—Arrivals very heavy—93,375 during five weeks. Prices advanced the first of the month, but the recent large receipts crowd them down again. They are now

worth 5c. @ 5½c. for heavy corn hogs, and 5½c. for prime. Several thousand were left unsold on Wednesday, November 24.

**The Weather** during the past four weeks, though somewhat rainy, has been rather pleasant on the whole, with but little severe freezing, and no snow in this vicinity to remain on the ground. OUR DAILY WEATHER NOTES, condensed, read: October 26 to 28, clear and moderate; 29, cloudy A. M., rain P. M.; 30, rainy day; 31, clear and fine.—November 1, clear and pleasant; 2, cloudy; 3, rain P. M.; 4, rainy; 5, cloudy, rain at night; 6, rainy day; 7, cool and cloudy; 8 and 9, clear; 10, cloudy; 11 and 12, clear and cool; 13, cloudy, with light rain; 14, clear and cold—Mercury 26°—ground frozen; 15, snow storm, which melted about as fast as it fell; 16, clear, and coldest day of the season thus far—23°; 17 to 20, clear and fine, with freezing nights; 21, snow A. M., rain P. M.; 22, clear and frosty, rain at night; 23, rain A. M., cloudy P. M.; 24, moderate, cloudy, frosty; 25, mild, clear and pleasant.

The actual circulation of the Agriculturist to regular subscribers, is believed to be much larger than that of any other Agricultural or Horticultural Journal in the world.

## Advertisements.

Advertisements to be sure of insertion must be received at latest by the 18th of the preceding month.

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Twenty-five cents per line of space for each insertion. About 9 words make a line, if undisplayed.  
One whole column (145 lines) or more, \$30 per column.  
Business Notices Fifty cents per line.

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Ten cents per line of space for each insertion.  
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And other pieces on five subjects, for the use of Sunday Schools. The package contains a sufficient number of copies of each dialogue to furnish each speaker a copy, so that all can be studying at the same time. Price 30 cents; sent by mail, prepaid, 41 cents.

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which is taking with all classes. It is a choice selection of music. Price, 15 cents; \$1 50 per dozen.

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Refers to the Editor American Agriculturist.  
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To any who will obtain new subscribers for us, we will pay the following liberal commissions:—For five new subscribers paying in advance, fifty cents each; for more than five and less than ten, seventy-five cents each; for ten or more, one dollar each. We will send a copy of our Bible Atlas, with colored maps, on paper of large size and best quality, to each new subscriber, on the receipt of his name and payment for one year.

If you cannot give personal attention to this work, will you show this advertisement to some clergyman or layman who will take an interest in it, to whom we will give the commissions mentioned above.

Your early attention is solicited to this matter, and we shall be happy to hear from you, immediately, as we desire to offer the paper at once to every family in the United States.

SIDNEY E. MORSE & CO.,

Editors and Proprietors,

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### YOUATT ON THE HORSE.

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THESE MELODEONS STAND UNRIVALED.

### THE DIVIDED SWELL,

A very desirable feature and secured to us by Letters Patent, can only be obtained in Melodeons of our own manufacture. By means of this improvement Tenor and Treble Solos or Duets may be played with the full power of the instrument, while the Bass can be performed in a soft, subdued tone, not otherwise attainable.

Our Reeds are so constructed that the

#### Melodeon Remains in Perfect Tune.

Thousands of them have been in use for many years that have never needed any repairs whatever, and we believe there is no Musical Instrument used that requires LESS EXPENSE to keep it in perfect order.

Our Melodeons are all cased in Rosewood, and finished as smoothly as the best Pianos. They are compactly boxed for shipping, and the cost of freight is but little to any part of the United States. They are so arranged that ANY ONE can unpack and put them up without difficulty.

We have been awarded

#### FIRST PREMIUMS

For our Melodeons wherever we have exhibited them in competition with others, and we have the satisfaction of believing that

#### OUR CONSTANT AIM TO EXCEL

Is appreciated by the Musical Public.

#### LIST OF PRICES.

|  |          |
|--|----------|
| <b>IN PORTABLE CASE—</b>               |          |
| Four Octaves, C to C.....              | \$45 00  |
| Four and a half Octaves, C to F.....   | 60 00    |
| Five Octaves, F to F.....              | 75 00    |
| Five Octaves, Double Reed, F to F..... | 130 00   |
| <b>IN PIANO CASE—</b>                  |          |
| Five Octaves, F to F.....              | \$100 00 |
| Six Octaves, F to F.....               | 150 00   |
| Five Octaves, Double Reed.....         | 150 00   |
| Five Octaves, Two Banks Keys.....      | 200 00   |
| The Organ Melodeon, C to C.....        | 350 00   |

This last is a most MAGNIFICENT INSTRUMENT for Churches, Halls and Concert Rooms.

It has two banks of Keys, five sets of Reeds, eight Stops, one and a half Octave Foot Pedals, and one set of Reeds in Pedal Bass, independent. It has all the power and volume of an \$800 Organ, at less than half the cost, and is much less liable to get out of order.

#### TESTIMONIALS.

MESSRS. G. A. PRINCE & CO.:

GENTLEMEN—The Double Reed Melodeon has arrived, and a most charming instrument it is. It has been played upon by Willson, Dr. Hodges, Wm. Mason and a host of others, and they all pronounce it one of the most beautiful toned instruments they have ever touched.

Yours respectfully,

JAMES F. HALL,  
New-York City.

From the Home Journal, April 3, 1858.

The Melodeons manufactured by Prince & Co., and for sale at 57 Fulton-st., are the best in the world. We have tried them, and therefore speak understandingly of their merits. They are afforded at a very moderate cost.

From Nicholas' New-York Bank Note Reporter.

MELODEONS.—We have frequently seen and heard the Melodeons manufactured by Geo. A. Prince & Co., and for sale at their depot, No. 57 Fulton-st., and we honestly think that the instruments are the best finished and the sweetest toned of any in the market.

Prof. A. Morris, of Richmond, Va., alludes to the Prince Melodeon as follows:

"For beauty and purity of tone, combining strength suitable for halls and small churches, with also the subdued quality desired for the parlor, these specimens of mechanical skill are really unequalled in the world, in this department of musical merchandise."

The following is the opinion of the Musical World:

"PARLOR ORGANS.—Messrs. George A. Prince & Co., have earned an enviable reputation for their manufacture of superior melodeons. In sweetness and purity of tone, and sensibility to the touch, these excel all others. The same qualities belong to their Parlor Organs, which are equal in volume to the Alexandre Organs, while they far surpass them in pleasing effect. A fair comparison will convince any one that we need not patronize a foreign manufacturer, since our own furnish an article far superior."

#### EXTRACTS FROM LETTERS RECEIVED.

"Our clergyman says:—A Prince Melodeon is one of the necessities of life."  
"I have used a Prince Melodeon for eight years, and it is still in perfect order."

"The 'Divided Swell' is just what was needed to make the Prince Melodeon a perfect instrument."

"I have examined various kinds, and have decided that those made by Prince & Co. are the best."

"The Organ Melodeon is received, and it affords entire satisfaction to the whole congregation."

ORDERS PROMPTLY FILLED AND EACH MELODEON WARRANTED PERFECT. Address

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Geo. A. Prince & Co., 118 Lake-st., Chicago, Ill.

Geo. A. Prince & Co.,

57 Fulton-st., New-York City.



52 John-st., New-York.

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Graper & Green-House Builder,  
YONKERS, N. Y.**  
Frames and Sashes for Hot-Houses. Green and Hot-Houses and Conservatories erected, and warranted.

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Honey made to Order

E. W. PHELPS'

SECTIONAL FRAME AND MOVABLE COMB HIVE

Patented Nov. 9th, 1858.

Three styles of Hives manufactured under the two Patents. By means of this novel and simple invention (patented Nov. 9th, 1858) the honey is stored and taken from the hive (without injury to the colony or exposure to a single bee), in "sectional frames," in separate pieces, five inches square, without cutting or moving the combs, and in the most convenient and beautiful form for transporting to market, or for table use, and readily sells for from five to ten cents more per lb. than in any other form.

Circulars describing the whole arrangement sent to all applicants on the receipt of a one-cent stamp.

Individual Rights to use the three Hives with instruction for making and using—\$5 00.

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N. B.—For Rights in Illinois address H. B. GIFFORD, Danby, Du Page Co., Ill.

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FOR

1859.

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The undersigned having, on his last visit to the old country, selected a few of the very best male Asses, especially raised for the purpose of breeding, is glad to announce to the persons interested in the raising of Mules, that he expects to receive them about the 15th of this month (December,) and offers them for sale.

The time of his staying in this city being very limited, applications should be made without delay. Address  
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Box 2677 New York City P. O.

### TWELVE SOUTHDOWN SHEEP for sale.

Also two Berkshire Boars, six months old, very fine. JOHN B. EDGAR.

Rahway, N. J., Nov. 22.

### CHINESE TARTAR SHEEP, for Sale.

My stock of the above breed of Sheep, being larger than I require, I offer a few of them for sale; the Mutton and breeding qualities are too well known, to need any criticism here.

Address H. WISTAR, Philadelphia, Pa.

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Price \$30 per pair. Address  
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### METROPOLITAN WASHING MACHINE—Washes with little labor rapidly and clean—described in Sept. Agriculturist. Price \$10.

WISNER'S WASHING MACHINE, described in March Agriculturist. Price \$5 50. For sale by  
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### THERMOMETERS, BAROMETERS, &c., of reliable quality and various descriptions, among which are those particularly suited for Horticultural purposes, which register the coldest and warmest degree of temperature during the 24 hours, in the absence of the observer. For sale by

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QUARTERMAN & SON, 114 John-st., New-York.

### CAUTION.

All persons are hereby cautioned against using, making or vending any machines in violation of CHAS. W. CAHOON'S Patent for SOWING SEED AND GRAIN—BROADCAST, issued Sept. 1st, A. D. 1857, and re-issued on the 11th day of May last. Suits have already been commenced against A. Leach the assignee of Aaron Ring, for using and selling machines under the Ring patent; and also against the manufacturer of the Ring Machines. And any person who shall hereafter be found using or vending any of the Ring Machines, or in any way violating said Cahoon's patent, will be prosecuted immediately. June 1, 1858. D. H. FURBISH, Proprietor.

D. H. FURBISH, Esq. BOSTON, May 21, 1858.  
Dear Sir:—I have examined with care the model of a broadcast sower, deposited in the Patent Office by Aaron Ring, and am clearly of the opinion that machines made according to that model would be infringing on the Letters-Patent re-issued to the assignees of Charles W. Cahoon, on the 11th of May instant. Yours respectfully,  
GEORGE T. CURTIS.

D. H. FURBISH, Esq. PORTLAND, June 1, 1858.  
Dear Sir:—Having seen the machine of Aaron Ring in operation, I entertain no doubt of its being an infringement of the patent issued to C. W. Cahoon's assignees.  
Yours truly,  
EDWARD FOX.

### CAUTION

TO PURCHASERS OF

### Movable Comb Bee Hives.

As sundry persons are selling hives with MOVABLE FRAMES, the public are hereby informed that the owners of L. L. Langstroth's Patent, believe that such Hives are infringements upon their rights. They are preparing to establish the validity of the Langstroth Patent by an appeal to the Courts of Law—and those purchasing interfering patents may lose the money invested in them.

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### ANGERS, FRANCE.

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F. A. BRUGUIERE, New-York.

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